# Raymond High School Program of Studies 2023 - 2024



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### About Raymond......

Raymond, incorporated in 1764, is a rural town of just under 30 square miles of land area and almost a mile of inland water area. The town was first settled by families from Exeter as a parish of Chester. It was known then as Freetown because it was first exempt from reserving its tall pine trees for masts in the Royal English Navy. It was incorporated in 1764 by Governor Benning Wentworth at which time it became known as Raymond. "Taking a new and classical name shows that there are minds not disposed to tread all of the time in one path, but capable of thinking and advancing and that the word Raymond means the lustrous, luminous, or shining world."

The population of Raymond is approximately 12,000 and is located 20 miles from Manchester, NH, 30 miles from the seacoast, and 70 miles from Boston. Built in 1988, the high school is located on 60 acres of land that was once part of a large farm. Raymond High School is a NEASC and New Hampshire Department of Education accredited four-year public comprehensive high school. The central office is located across from the high school gym.

The Raymond School District is comprised of three schools. Lamprey River Elementary School houses grades K-3 with a total enrollment of 353 students during the 2022-2023 school year and Iber Holmes Gove Middle School houses grades 4-8 with a total enrollment of 415 students during the 2022-2023 school year. Raymond High School houses grades 9-12 as well as the district's preschool program with a total enrollment of 392 students.

The largest businesses in Raymond are: Walmart Distribution Center, Hannaford Supermarket, JCR Construction, and Tuckaway Tavern & Butchery.

# RAYMOND HIGH SCHOOL CORE VALUES & EXPECTATIONS

### WE ARE FOREVER GREEN

### **Core Values**

At Raymond High School we value high levels of learning for all. Through innovation, collaboration, and encouragement, we challenge each student with a rigorous and relevant program

### **Beliefs**

Our community is committed to providing a safe, rigorous, and relevant learning environment.

- We are dedicated to recognizing, supporting, and celebrating everyone's diversity, unique abilities, learning styles, and achievements.
- We demonstrate self-reliance, critical thinking, effective communication, and productive collaboration.
- We practice perseverance when challenged.
- We are engaged and responsible citizens.
- We are accountable for our own actions.

# Learning Expectations Academic Social Civic Critical Thinking Collaboration Engagement Communication Self- Reliance Responsibility

### **Raymond School District Mission Statement & Vision Statement**

Perseverance

The Mission of Raymond School District is to develop successful and adaptable lifelong learners. With our community as partners, each student will be valued, encouraged and challenged by a rigorous and relevant program.

Uniting our school district and community to prepare students for future success; ready for anything!

### **Raymond School District Policy**

Non-Discrimination/Equal Opportunity The District shall not discriminate in its education programs, activities, or employment practices on the basis of race, color, national origin, age, sex, sexual orientation, religion, or handicap under the provision of Title V1 of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendment of 1972, and Section 504 of the Rehabilitation Act of 1973. Any person having inquiries concerning the District's compliance with the regulations implementing these laws may contact the Superintendent of Schools.

### **Competency-Based Grading**

Raymond's competency-based grading system is designed to report out to students and parents three different types of information: 1—Competency in various academic skills, 2—Overall grade average for the course, and 3—Work Study Practices. Ultimately, this will provide the student and parent with a more complete report of the student as a learner than a traditional A-B-C-D-F system. The goal is to create grades that reflect not only what a student earns, but what the student knows and learns.

**Competency:** Rather than each student's education revolving around the accumulation of credits, the acquisition and demonstration of competencies are the focus. In a competency-based model, students are continually assessed on a series of course-specific competencies— the big ideas—related to the skills to be learned through each course. Each competency is broken down into a smaller subset of specific skills and learning targets known as power standards. In some cases, competencies and indicators are common to more than one course. Rather than judge progress based on time spent in a class or scores on tests, quizzes, and other assignments, the focus is on the mastery of skills. The most important question is, "What do we expect students to know and be able to do?"

Formative Assessments & Formative Practice, also known as practice and preparation, are assessments <u>for</u> learning. These assignments inform teachers, students and parents of where the student is in the learning process. They also allow for feedback opportunities to help the student improve and prepare for the summative assessments. The types of assignments that fall into this category include, but are not limited to:

- Homework
- Skill checks or quizzes
- Entrance/exit tickets
- First drafts of writing assignments
- Graphic organizers and brainstorming
- Informal observations of student work
- Pre-tests
- Logs or journals including practice logs

Summative Assessments are assessments <u>of</u> learning. These assessments allow teachers to measure the level of student achievement of a standard(s). The types of assessments that fall into this category include, but are not limited to:

- Tests
- Projects
- Presentations
- Performance Assessments

- Writings (papers, essays, stories, lab reports, summaries, etc.)
- Authentic learning tasks (real word applications & problem solving)

Work Study Practices: Separated from the assessment of students' academic knowledge and skill in a particular course, assessment of work study practices focuses on identifying skills and dispositions that are the most significant contributors to a successful learning experience. Students are recognized as individual learners developing skills and dispositions that transfer to all their learning experiences. The assessment of a student's achievement in these areas is part of single assessments, and develops across an entire course. As these are skills needed to learn effectively, and separate from the student's level of achievement academically, these grades are shown alongside, but do not contribute to competency and overall course grades. Work Study Practices are not subject-specific. As a result, teachers in all courses during a student's high school experience assess their developing skills in each of four areas—Communication, Creativity, Collaboration, and Self-Direction. These assessments are combined over time into an ever-changing representation of a student's current skill level in each. Similar to the four-point rubric used for academic grades, teachers use a four-point rubric to assign work-study practice grades at the assignment level, at the unit level, or on a quarterly basis.

### **GRADUATION REQUIREMENTS**

Courses	Raymond High School Diploma	Raymond High School Honors Diploma*
English	4	4
Math	3	3
Social Studies	2.5	2.5
Science	3	3
Fine & Performing Arts	.50	.50
Health	.50	.50
Computers	1	1
Physical Education	1	1
Electives	8.50	10
World Language	0	2
ELO/Online Learning	0	.50
Total	24	28

<sup>\*</sup>Honors Diploma - Students must earn 28 credits, have taken 2 years of consecutive world language and must maintain a minimum grade point average (GPA) of 3.27 or higher.

### Passage of Civics Exam

Effective for students graduating in 2024, the district will also administer the 128 question civics (history and government) naturalization examination developed by the 2020 United States Citizen and Immigration Services ("U.S. Citizenship Test"). This exam may be modified for a student with a disability in accordance with the student's individualized education program. Students must earn a grade of 70 percent or better to be eligible to receive a high school diploma or other graduation certificate.

### **Federal Student Aid Application**

Effective for students graduating in 2024, as a requirement for receiving a high school diploma, each student who is at least 18 years of age or legally emancipated, or the parent/guardian of such a student who is under 18 years of age, shall either:

- 1. file a Free Application for Federal Student Aid (FAFSA) with the U.S. Department of Education; or
- 2. file a waiver on a form created by the N.H. Board of Education with the District indicating that the parent/guardian or, if applicable, the student, understands what FAFSA is and has chosen not to file an application.

### ATHLETICS AND CO-CURRICULAR ACTIVITIES

# Extracurricular Activities Raymond High School sponsors the activities listed below

To be eligible for any extracurricular activities, all students must meet the standards of eligibility as outlined in the school district policy.

https://www.sau33.com/sites/g/files/vyhlif5441/f/uploads/athletic\_and\_extracurricular\_eligibility\_2022\_-23\_handbook\_approved\_final.pdf

Art Connections	Drama	Math Team	RHS Site Council
Band	Financial Literacy	National Honors Society	Robotics
Book Club	Gay/Straight Alliance (GSA)	Raymond Coalition for Youth (RCFY)	Student Athletic Leadership Team (SALT)
Chorus	Granite State Challenge	Raymond Police Explorers	Student Council
Cinematography	Interact Club	Reach High Scholars	Yearbook

**Interscholastic Sports** 

interseriorastic sports				
Baseball	Cross Country	Spring Track	Unified Spring Track	
Basketball	Football	Volleyball	Wrestling	
Bowling	Soccer	Winter Track	eSports	
Cheer	Softball	Unified Basketball		

# SUGGESTED CORE COURSE OF STUDY

	ENGLISH	MATHEMATICS	SOCIAL STUDIES	SCIENCE	WORLD LANGUAGE
SELECTIVE COLLEGE and MILITARY ACADEMIES	4 credits Including: Honors World Lit Honors American Lit Honors or AP Electives	4 credits Including: Honors Algebra I Honors Geometry Honors Algebra II Honors Pre-Calculus AP Calculus	4 credits Including: Honors World History Honors Economics Honors Government Honors/AP US History Social Studies Electives	4 credits Including: Honors Physical Science Honors Biology Honors Chemistry Honors/AP Physics Anatomy & Physiology	4 credits Strongly recommended that a student take 3 years of the same language: French Spanish
4-YEAR COLLEGES	4 credits Including: World Literature American Lit Electives	4 credits Including: Algebra I Geometry Algebra II Statistics or Honors Pre-Calculus	3-4 credits Including: World History Economics Government U.S. History Holocaust and Genocide Studies Social Studies Electives	3 credits Including: Physical Science Biology Chemistry or Lab Science	4 credits Strongly recommended that a student take 2 years of the same language: French Spanish
COLLEGE and CAREER READY	4 credits Including: World Literature American Lit Electives	3-4 credits Including: Algebra I Geometry Algebra II Math Elective	3 credits Including: World History Economics Government U.S. History Holocaust and Genocide Studies Social Studies Electives	3 credits Including: Physical Science Biology Chemistry	3 credits Strongly recommended that a student take 2 years of the same language: French Spanish

### **New Hampshire Scholars**

All students, regardless of their post high school plans, are encouraged to follow the New Hampshire Scholars course of studies.

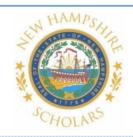
New Hampshire Scholars is part of the State Scholars Initiative, a national program that uses business leaders to motivate students, beginning in Grade 8, to complete a rigorous course of studies in high school. This program will give them a boost in college and careers.

New Hampshire Scholars encourages and motivates all high school students to complete a rigorous course of study that prepares them for successful transition to college coursework or technical training necessary to enter today's competitive job market.

Courses that meet New Hampshire Scholars requirements are designated with the symbol course description.



### NEW HAMPSHIRE SCHOLARS CORE COURSE OF STUDY & OPTIONAL PATHWAYS



#### **Core Course of Study**

- · 4 years of English
- 4 years of Math
- 3 years of Science with labs
- 3 ½ years of Social Studies/ Social Science
- 2 years of a foreign language

#### **STEM Pathway**

- · 4 years of English
- 4 years of Math
- 4 years of Science (3 with labs)
- 3 ½ years of Social Studies/ Social Science
- 2 years of a foreign language
- · 1 year (or more) STEM-related
- Minimum 3.2 GPA (4.0 scale)

#### **Arts Pathway**

- · 4 years of English
- 4 years of Math
- · 3 years of Science with labs
- 3 ½ years of Social Studies/ Social Science
- · 2 years of a foreign language
- · 2 years (or more) Arts-related
- Minimum 3.2 GPA (4.0 scale)

### STEAM Pathway

- 4 years of English
- 4 years of Math
- 4 years of Science (3 with labs)
- 3 ½ years of Social Studies/ Social Science
- 2 years of a foreign language
- · 1 year (or more) STEM-related
- · 2 years (or more) Arts-related
- Minimum 3.2 GPA (4.0 scale)

#### **Career Pathway**

- · Core Course of Study
- 1 career credit
- One work-based learning experience
- Earned college credits, industryrecognized certificate, or postsecondary hours

# Raymond High School Four-Year Personal Academic Planner

Student Name:	CI	ass of:	Counselor:		
Diploma Type: Standard/Honors Career Interests:					
	Grade 9	Grade 10	Grade 11	Grade 12	
English	World Literature	American Literature			
Math	Algebra 1	Geometry			
Science	Physical Science	Biology			
Social Studies	World History	US History	Am. Gov. and Civics Economics		
Art					
Computer					
Physical Education	PE-A S1/S2 PE-B S1/S2				
Health		Health			
Elective					
Total Credits					
	ED TO GRADUATE - See Goma - 24 Credits	Graduation Requirement ( Honors Diploma			
4.00 ENGLISH 3.00 MATH	.50 ARTS 1.00 COMPUTER	3.00 SCIENCE 2.50 SOCIAL STU		AL EDUCATION 8.00 ELECTIVES	

### **COURSE LEVEL DESCRIPTIONS**

### **COLLEGE & CAREER READY**

These courses are designed to prepare all students for success in college, careers, and other types of post secondary education opportunities. They will provide rigorous and relevant learning experiences that strengthen and expand students' knowledge and skills as part of a well rounded high school education. College & Career Ready courses will emphasize application of transferable skills and knowledge that will prepare all students to thrive and meet the demands of a changing world after high school.

### **HONORS**

These courses are designed for students who desire to expand and deepen their learning in a particular subject area. Honors courses have the same foundation as College and Career Ready courses, but offer more opportunities for in-depth or extended experiences that require the application and synthesis of high level skills and knowledge in the content area. Students who desire admission to a very competitive college, have very strong skills in the subject area, or whose future career goals will be furthered through Honors level study should consider enrolling in Honors level courses.

### **HONORS BY EXHIBITION**

Honors by Exhibition courses are intended for students who seek to engage in Honors level study in a particular subject area, but whose schedules will not allow them to enroll in the Honors course offered during the school day or who seek Honors level study in a specific course of study that is available only at the College & Career Ready level. Students enrolled in a College & Career Ready course may opt to take that course for Honors credit through an Honors by Exhibition contract. In addition to being successful in the classroom, the student must commit to work with the teacher to develop a plan to extend or deepen their learning beyond the standard course requirements to ultimately demonstrate, or exhibit, that they have earned Honors credit. Honors by Exhibition plans can be highly individualized to the interests of the student in the context of course requirements. Students who choose to engage in an Honors by Exhibition course must be able to work independently as necessary to complete extended course requirements agreed upon in the Honors by Exhibition Contract.

### ADVANCED PLACEMENT

Advanced Placement (AP) courses enable students to pursue college-level studies while still in high school. These very rigorous courses are designed for students interested in applying to the most highly competitive colleges or post secondary education programs, or for those who have a notable area of strength in a subject area that they wish to develop further. Each AP course is modeled upon a comparable college course, and college and university faculty play a vital role in ensuring that AP courses align with college-level standards. These courses emphasize higher-order thinking skills, independent and self directed research, and stress problem-solving in multidisciplinary contexts. The curriculum and pacing of these classes are dictated by the College Board. Students in Advanced Placement classes are required to take the AP exam in the spring.

### HONORS BY EXHIBITION CONTRACT

Course Title:	
Instructor:	
School Year:	
Details of the Honors by Exhibition option <b>mus</b> to this document.	t be included below or the plan must be attached
To earn honors credit for this course, both stude personalized learning activities will fulfill the reachievement (reference required components or Contract description).	equirements to demonstrate Honors level
I, at any progress or marking period, do not fulf earning a passing grade, I will be dropped from also understand that I must successfully comple	erstand that the rigor and workload will be course for honors credit. I also understand that if ill the standard requirements of the course by the Honors by Exhibition option in this class. I
Student name:	
Student signature:	Date:
Parent or Guardian name:	
Parent or Guardian signature:	Date:
Teacher name:	
Teacher Signature:	
Department head name:	
Department head signature:	
Administrator name:	
Administrator signature:	

### ADVANCED PLACEMENT AGREEMENT FORM

All Advanced Placement (AP) students are required to take the AP exam as an integral part of their experience in the course. The College Board and your child's teachers have carefully designed these intensive college-level classes with the intent that the AP exam be the culminating activity. In a very few extraordinary circumstances there may be a student who does not take the AP test. Please note that a student who fails to take the AP exam in May will be awarded honors level credit rather than AP level credit (on a 6.33 scale). This will not change their actual course grade, but may affect their GPA and/or class rank. We want to give our strongest recommendation that all students take the AP exam.

The College Board charges about \$100 fee for each Advanced Placement exam. The fee must be paid prior to the exam date in May of the examination year. A reminder will be sent home in advance. Checks should be made out to Raymond High School. The College Board also charges a \$45 handling fee for any exam which is ordered but is not taken. If a student fails to take the exam for any reason, once it has been ordered, she/he will be charged for the handling fee, and must pay it before graduation. Students experiencing financial hardship should speak to their school counselor.

Each student and their parent/guardian must sign and return this form to their AP teacher during the first week of class.

We have read and understand the information regarding the AP exam expectations for Raymond High School as outlined in the Program of Studies.

AP Course(s) to be taken:		
Student Name (please print)	Student Signature	
Parent/Guardian Name (please print)	Parent/Guardian Signature	
Today's date:	_	

# **College Credit Options**

### **Running Start**

The Running Start program enables high school students to take community college courses for dual high school AND college credit. Courses offered through the Running Start program are college courses taught at high schools by teachers who have college-level teaching credentials and use a college syllabus and course materials. These courses are taken as part of the daily class schedule.

- \*Tuition is approximately \$150 per course a huge savings from the regular cost of college courses (STEM courses may be covered by Governor's scholarship).
- \*Get an affordable jump start to a college degree and career skills
- \*Transfer credits to many colleges and universities

### **Early College**

The Early College program enables high school students to take courses on the campus of a NH Community College at a discount of half the "regular" college cost for each course. Just like in the Running Start program, students earn college credit, which gives them a jump on college requirements and saves money. Early College courses are also eligible for STEM/CTE scholarships. Students should work with their high schools to make sure the course will be counted as part of high school requirements.



The Virtual Learning Academy Charter School (VLACS) Early College Program offers students the opportunity to earn college credit and potentially an associate degree while attending high school! The idea is that students have the capability to meet the rigorous intellectual challenges posed by college level work, especially when motivated by the opportunity to save time and money. Classes offered through VLACS for college credit are available for review through the VLACS website. <a href="https://vlacs.org/curriculum/learning-catalog/?level=College">https://vlacs.org/curriculum/learning-catalog/?level=College</a>

### **Protocol for Student Course Changes**

All students in grades 9-11 must be enrolled in 7 courses each semester, unless it is deemed necessary to have a study hall. Seniors who are on schedule with credits for graduation must be scheduled in a minimum of 5 courses each semester. The add/drop period will be within the first **five school** days of each semester. Any student dropping classes after the add/drop time period will have a WF (withdrawal fail) or a WP (withdrawal pass) on their transcript.

**Parent-requested schedule changes** are reserved for serious reasons and must be approved by an administrator and the affected teacher(s).

# **Course Descriptions**

NH Scholars courses that meet New Hampshire Scholars requirements	SCHOLNES TO STATE OF THE STATE
NCAA College sports eligibility varies depending on year of high school graduation and between Division I, II, and III schools. The specific requirements can be found in the Raymond High School Counseling Office or by going to www.ncaaclearinghouse.net.	NC4A
4th Year Math Earns 4th year exposure to Math	
College & Career Readiness Courses: The goal of the college and career readiness courses (CCR) at Raymond High School is to ensure all students are provided the background in academic subjects that would prepare them for the academic work they would do in college or need for a career upon high school graduation.	THE SS. OF
Running Start: The Running Start programs are college courses taught at the high school and Seacoast School of Technology (SST) by credentialed high school faculty as part of the daily class schedule. Running Start courses taught at the Seacoast School of Technology are identified in the Program of Studies with the Running Start Logo. The fee for each course is \$150.00.	<b>7</b>

# HUMANITIES DEPARTMENT English

RHS graduation requirements: World Literature 1 credit, American Literature 1 credit, Junior Electives 1 credit,

Senior Electives 1 credit

State graduation Requirement: 4 English credits

GRADE 9	GRADE 10	GRADE 11	GRADE 12
World Literature, Honors World Literature	American Literature, Honors American Literature	English Electives*, AP English	English Electives*, AP English

<sup>\*</sup>Courses offered during school years beginning with an even number.

### **World Literature**

Required for Freshmen 1 credit/full year Grade 9







The goal of this course is to provide students with fundamentals skills needed to be successful in high school with a survey of world literature which will delve into a selection of works from many eras and diverse cultures. Students will read a selection of novels, stories, poetry and drama in detail, will discuss in small and large groups, and will write extensively about their reading. Students will be assessed on a frequent basis. Assessments will include formatives and summatives based on those foundational skills. Vocabulary study, oral presentations, and responses to relevant digital resources will all be components of the course.

### **Honors World Literature**

Recommendation:: 2.7/B or higher in previous English course

1 credit/full year Grade 9







The goal of this course is to provide students with fundamentals skills needed to be successful in high school with a survey of world literature which will delve into a selection of works from many eras and diverse cultures. Students will read a selection of novels, stories, poetry and drama in detail, will discuss in small and large groups, and will write extensively about their reading. Students will be assessed on a frequent basis. Assessments will include formatives and summatives based on those foundational skills. Vocabulary study, oral presentations, and responses to relevant digital resources will all be components of the course. The Honors designation consists of a deeper analysis and rigorous pacing. Students will be required to complete additional summer reading assignments and to show a mastery of their reading upon their return to school.

<sup>\*\*</sup>Courses offered during school years beginning with an odd number.

### **American Literature**

Required for Sophomores 1 credit/full year Grade 10-11







This course covers several thematic units in which students will answer the essential question, "What does it mean to be American?" In each project-based unit, students will read a variety of fiction and nonfiction, participate in class discussions, and write extensively in response to the readings. Work will also include other nonfiction essays and creative writing, as well as oral presentations and projects.

### **Honors American Literature**

Recommendation: 2.7/B or higher in previous English course 1 credit/full year Grade 10-11







This course covers several thematic units in which students will answer the essential question, "What does it mean to be American?" In each project-based unit, students will read a variety of fiction and nonfiction, participate in class discussions, and write extensively in response to the readings. Work will also include other nonfiction essays and creative writing, as well as oral presentations and projects. Students will be required to complete additional summer reading assignments and to show mastery of the material upon their return to school.

# Advanced Placement English Literature & Composition\*\*

Requirement: 2.7/B or higher in Honors American Lit./Teacher Recommendation 1 credit/full year Grades 11-12







This college-level course will engage students in the careful reading and critical analysis of a wide variety of literature. This will include an intensive focus on many genres and periods. Intensive critical examination, interpretation, and evaluation will be expected throughout the course through daily class discussions and extensive written analysis. Students in AP should be very strong readers and writers. Summer reading is required; students will be required to show mastery of the material upon their return in the fall. NOTE: STUDENTS ARE REQUIRED TO TAKE THE AP EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their School Counselor.)

# Advanced Placement English Language & Composition\*

Requirement: 2.7/B or higher in Honors American Lit./Teacher Recommendation 1 credit/full year Grades 11-12







This college-level course will engage students in the close reading and critical interpretation of writing, particularly non-fiction. This is an extensive writing program encompassing a variety of styles and audiences with emphasis on vocabulary development, syntax, diction, and mechanics. Students will develop research skills and the ability to evaluate both primary and secondary sources. Through their

writing, students are encouraged to find meaning in what they read, interpret beyond the surface level, reflect with thoughtful perception, support with textual passages, and write with stylistic maturity. Students in AP should be very strong readers and writers. Summer reading is required; students will be required to show mastery of the material upon their return in the fall. **NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)** 

### **World Mythology**

Recommendation: Honors American Lit. .50 credit/1 semester Grade 11-12







In this course students will study a variety of myths and legends from diverse cultures around the world. We will explore common themes and characters across cultures and time periods. Reading and comprehension strategies will be emphasized with each literary selection, and writing assignments will be developed from within the context of the reading. Formatives and Summatives will comprise the performance assessments for the course.

### **Creative Writing**

Recommendation: American Literature .50 credit/1 semester Grade 11-12







Creative Writing is a one-semester course focused on writing a variety of pieces, including descriptive, narrative, and memoir writing. Students will also read contemporary essays, short stories, and poems as examples and learn various ways to tap their inherent creativity. This course is taught in a workshop environment, which includes sharing of work, peer editing, self-assessment, and frequent student-teacher conferences in a supportive environment. Independence in creating and meeting deadlines is essential for students in this course. Journals and electronic portfolios are required. Evaluation will include an assessment of the semester writing portfolio.

#### Film as Literature

Recommendation: American Literature .50 credit/1 semester Grade 11-12





This is a **writing intensive course** that will focus on viewing and analyzing a variety of current and classic films that have made a lasting impression and are representative of culturally significant themes. Students will become familiar with film language and the storytelling techniques of film. The goals of the course include: 1) teaching students how to analyze films as texts and modern non-fiction; 2) preparing students to be active, critical thinkers in our modern American society; 3) reinforcing the knowledge of literary devices as students analyze elements of plot, setting, conflict, theme, character development, mood and motifs in film.

### **Public Speaking**

Recommendation: American Literature .50 credit/1 semester Grade 11-12







This course will introduce students to the principles of effective communication through presentations. Students will prepare and deliver at least five speeches, perform weekly impromptu exercises, and will participate in at least one debate. Students will be required to critique coursework through both peerand self-evaluations. Research skills will be developed and used throughout the course. Full participation and consistent attendance is an integral part of a student's successful completion of this course.

### **Popular Literature**

Recommendation: American Literature .50 credit/1 semester Grade 11-12





Readings in this course will come from a variety of fiction genres in both the short story and novel form. Work will also focus on author biographies and contemporary essays on popular fiction. Frequent written responses, critical analysis, and active participation in discussion are required. This course will emphasize competency in reading and writing, and encourage critical thinking and listening skills. Response journals, class discussion, and self-assessments are required.

### **Honors Popular Literature**

Recommendation: 2.7/B or higher in Honors American Literature .50 credit/ 1 semester Grade 11-12







Readings in this course will come from a variety of fiction genres in both the short story and novel form. Work will also focus on author biographies and contemporary essays on popular fiction. Frequent written responses, critical analysis, and active participation in discussion are required. This course will emphasize competency in reading and writing, and encourage critical thinking and listening skills. Response journals, class discussion, and self-assessments are required. The Honors designation consists of a deeper analysis and rigorous pacing. Students will be required to complete additional summer reading assignments and to show mastery of the material upon their return to school.

### Honors Diverse Perspectives in Literature\*\*

Recommendation: American Literature .50 credit/1 semester Grade 11-12





Diverse Perspectives in Literature uses excellent contemporary literature to explore the issues of gender, race, and class in society. This course is designed for serious readers who enjoy discussion and sharing of concepts and ideas. A mature outlook and open mind are required for participation in the course because the works read contain mature themes and language. A good preparatory class for the college-bound, Diverse Perspectives in Literature emphasizes seminar-style participation and critical thinking skills through thesis development and analytical writing.

### Children's Literature

Recommendation: American Literature .50 credit/1 semester Grade 11-12





Children's Literature is designed to give students a general survey of literature produced specifically for children. We will study the purpose and history of the literature, read and analyze examples of classic works and engage in small and large group discussions. Our study will lead into the exploration of theories about children's emotional and cognitive development as a means to establish guidelines for selecting and creating age-appropriate literature for young audiences. Formatives and Summatives will comprise the performance assessments for the course. Students will create original illustrated fairy tales and picture books. The picture book assignment is a term project which will culminate with students presenting their original work to the Little Lambs at the Raymond Preschool Program.

### Honors Introduction to Dramatic Literature\*

Recommendation: American Literature .50 credit/1 semester Grade 11-12





Introduction to Dramatic Literature will explore the characteristics of dramatic form and analyze the ways in which the purpose and the presentation of the genre has evolved over time. The goal of the course is to examine the effect of social and historical contexts on the creation and reception of the genre by studying various texts and schools, including realism and verse drama. We will also discuss plays that address issues of power and identity by examining works written by diverse playwrights. By examining form and content, students will be able to discuss dramatic structure, use of dialogue, setting and character. Students will write 10-minute plays and short analytical papers.

# HUMANITIES DEPARTMENT Social Studies

**RHS graduation requirements:** World Social Studies .50 credit, Economics .50 credit, Government .50 credit, U.S. History 1 credit.

**State graduation requirements:** World Social Studies .50 credit, Economics .50 credit, Government .50 credit, U.S. History 1 credit.

Grade 9	Grade 10	Grade 11	Grade 12
World History	US History	Am Gov & Civics Economics Social Studies Electives (including Holocaust and Genocide Studies)	Social Studies Electives (including Holocaust and Genocide Studies)
Honors World History	Honors US History	AP Social Studies Course Honors Am Gov & Civics Honors Economics Social Studies Electives (including Holocaust and Genocide Studies)	AP Social Studies Course Social Studies Electives (including Holocaust and Genocide Studies)

<sup>\*</sup>Courses offered during school years beginning with an even number.

Effective for students graduating in 2024, the district will also administer the 128 question civics (history and government) naturalization examination developed by the 2020 United States Citizen and Immigration Services ("U.S. Citizenship Test"). This exam may be modified for a student with a disability in accordance with the student's individualized education program. Students must earn a grade of 70 percent or better to be eligible to receive a high school diploma or other graduation certificate.

### World History

1 credit/1 full year Grade 9







The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. This course is designed to provide students with a broad understanding of the economic, political, technological, religious and social developments that shaped the world we live in today.

<sup>\*\*</sup>Courses offered during school years beginning with an odd number.

### **Honors World History**

Recommendation: 2.7/B or higher in 8th grade Social Studies or Teacher Recommendation 1 credit/full year Grade 9







This course is the advanced introductory Social Studies course for self-motivated Freshmen. The purpose of this course is to enable students to understand their connections to the development of civilizations by examining the past to prepare for their future as participating members of a global community. This course is designed to provide students with a broad understanding of the economic, political, technological, religious and social developments that shaped the world we live in today.

### **Economics**

.50 credit/1 semester Grade 11-12









Economics is the study of choices and decisions people make about how to use the world's resources. This course will help the student make informed decisions about their financial resources. They will gain an understanding of the relationship between economic concepts and real-world economic events affecting all people in the global economy. Included in Economics is the study of the American free enterprise system, government intervention in our economy, supply and demand, inflation, unemployment, business structures, the Stock Market, money and banking, and personal finance.

### **Honors Economics**

Recommendation: 2.7/B or higher in previous Social Studies course .50 credit/1 semester Grades 11-12









Economics is the study of choices and decisions people make about how to use the world's resources. This course will help the student make informed decisions about their financial resources. They will gain an understanding of the relationship between economic concepts and real-world economic events affecting all people in the global economy. Included in Economics is the study of the American free enterprise system, government intervention in our economy, supply and demand, inflation, unemployment, business structures, the Stock Market, money and banking, and personal finance.

### **American Government & Civics**

.50 credit/1 semester Grades 11 -12







Government is an essential and foundational social studies course with primary emphasis on the functioning of national, state and local government institutions. Other topics covered in this survey course include the US Constitution and the American legal system, current issues of concern to the United States, values and decision making techniques as rights and responsibilities of citizenship, and political parties and the voting process. This is a preparatory course for the New Hampshire mandated Citizenship test required for graduation.

### **Honors American Government & Civics**

:Recommendation: 2.7/B or higher in previous Social Studies course .50 credit/1 semester Grades 11 - 12







Honors Government is an essential and foundational social studies course with a concentration on the United States Constitution and the Bill of Rights, and their effects on everyday life, for self motivated Juniors and Seniors. Additional emphasis will be placed on the functioning of national, state and local institutions; the American legal system; current issues of concern to the United States; values and decision-making techniques as rights and responsibilities of citizenship, and political parties and the voting process. This is a preparatory course for the New Hampshire mandated Citizenship test required for graduation.

### **United States History**

1 credit/full year Grade 10







U.S. History explores the role of the United States in the 20th century. The major themes of U.S. History are domestic policy and foreign policy. Within these broad areas students will use modern technology as well as traditional methods to develop a comprehensive background of significant events. These include domestic and international expansion; Constitutional changes through the 20th century; technology and the growth of the middle class; Depression and Recovery; World War II era; the growth of the United States as a global superpower; and the post-World War II era, including the Korean War, Civil Rights, the Vietnam War, and related social changes that impacted our country's history.

### **Honors United States History**

Recommendation: 2.7/B or higher in previous Social Studies course 1 credit/full year Grade 10







Honors U.S. History explores the role of the United States in the 20th century. The major themes of the H.U.S.H. are domestic policy and foreign policy. Within these broad areas students will use modern technology as well as traditional methods to develop a comprehensive background of significant events. These include: domestic and international expansion; Constitutional changes through the 20th century; technology and the growth of the middle class; Depression and Recovery; World War II era; the growth of the United States as a global superpower; the post-World War II era, including the Korean War, Civil Rights, the Vietnam War, and related social changes that impacted our country's history. This course is recommended for those students who seek an intense academic setting or have a passion for history.

### Advanced Placement United States History\*\*

Requirement::2.7/B or higher in previous Honors Social Studies course and teacher recommendation 1 credit/full year Grades 11-12







The Advanced Placement Program course and examination in United States History is a one-year program that is intended for qualified students who wish to complete studies in secondary school equivalent to college introductory courses in U.S. History.

The AP program in United States History is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in United States history.

Students should learn to assess historical materials – their relevance to a given interpretive problem, their reliability, and their importance – and to weigh the evidence and interpretations presented in historical scholarship.

An AP United States History course should thus develop the skills necessary to arrive at conclusions on the basis of the informed judgment and to present reasons and evidence clearly and persuasively in essay format. Also, students may be eligible for dual enrollment status at SNHU, potentially earning 6 college credits. NOTE: STUDENTS ARE REQUIRED TO TAKE THE AP EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)

### Anthropology\*\*

.50 credit/1 semester Grades 11-12







This one semester elective course is an opportunity to explore different groups of people: who, where, when, and why. As with history, some of these societies may be from other millennia or centuries, and as with current events, these groups may be from the 20th or 21st century. Each society is studied through four main areas (domains): cultural (beliefs and customs), biological (physical traits), linguistic (language), and archeological (tools, artifacts). Some of the groups studied in prior years include soccer players from Tanzania, 17th century colonists, and RHS graduating seniors from 1918 to the present using RHS Yearbooks as an exploratory tool.

#### In The News

.50 credit/1 semester Grades 11-12







This course focuses on many of the issues confronting American Society in the 21st century. Topics will be studied, debated, and evaluated with regards to their relevance at the time the course is being historically relevant. Potential topics include: Gun Control/School Shootings, Abortion, Illegal Immigration, Welfare, Defense Spending/Government Waste, Drug Legalization, Affirmative Action, Gay Rights, Environmental Issues, the Death Penalty, and Physician Assisted Suicide. The course will have an emphasis on discussion. Students are expected to successfully complete readings and conduct research using a variety of print, media, and technological sources.

### **Criminal Law**

.50 credit/1 semester Grades 11-12







This one semester elective course is offered to provide students an overview of the criminal justice system with an emphasis on New Hampshire statutes. Because of the real time nature of the subject matter, students rely on primary sources for instruction and research. The NH Criminal Code is accessed throughout the course to develop an understanding of the laws that govern daily life and ensure that we are a nation of laws and not individuals. To support this concept, a thorough examination and understanding of case law is pursued. As part of our examination of the criminal justice system, due process rights are carefully identified and explored. Throughout the semester, the U.S. Constitution is referenced for understanding and perspective.

### **Criminal Law: True Crimes**

Prerequisite: Criminal Law .50 credit/1 semester Grades 11-12







*Criminal Law: True Crimes* is designed to be a high interest and informative continuation of criminal law studies. The course foundation is built upon prior knowledge from *Criminal Law* for an in depth examination of both New Hampshire and national crimes of interest. All aspects of criminal activity will be examined including motive, victim impact, role of law enforcement, penalties and consequences, as well as Constitutional considerations.

### Civil Law\*\*

.50 credit/1 semester Grades 11-12







Civil Law is an overview of the day-to-day legal situations which face all of us at one time or another. Emphasis is placed on New Hampshire interpretation of civil law. Course content includes the following areas: Family Law (marriage, parenting, and divorce), Tort Law (negligence, intentional wrong, strict liability), Finance Law (credit and contracts), Estate Law (probate and inheritance), Bankruptcy Law, Housing Law and Tax Law. An examination of these legal areas will involve a variety of resources and examination of important court cases.

### History of Religions\*

.50 credit/1 semester Grades 11-12







This course explores the interconnecting role of religion and world politics. The role of religion in government and global politics is universal and it is the mission of this course to instill a basic understanding of world religions, including Buddhism, Christianity, Hinduism, Islam, and Judaism. With the religious background, an examination of historic and current global issues and conflicts will be examined.

### **Holocaust and Genocide Studies**

.50 credit/1 semester Grades 11-12



What drives an ordinary person to commit atrocities? How does the world stand by and do nothing as mass-killings occur? Why are victim groups chosen? How do victim groups fight back? How does the rest of the world respond? All these questions will be looked at in class. Primary source analysis and film will be used to deliver content. Topics covered may include: Armenian Genocide, Holocaust, Cambodian Genocide, Genocide of Indigenous Peoples, Rwandan Genocide, and current conflicts.

### **Psychology**

.50 credit/1 semester Grades 11-12







This course is an introduction to the science of human behavior. Major emphasis will be placed on child development, learning and cognition, the mind, memory, discussing mature topics and preparing independently for major discussions, debates and presentations. This course will give students the opportunity to gain insight into their own lives and behavior, while requiring advanced reading and critical thinking skills.

### Sociology\*

.50 credit/1 semester Grade 11-12







This course is an introduction to the study of human society. Students will learn about the impact of society and culture on individuals and about the role of individuals in the construction of social life and culture. The main topics to be covered include: culture, socialization, deviance, social stratification, race & ethnic relations, gender & age inequalities, and social institutions (family, religion, sport). A central focus of the course is understanding the nature of the individual in society.

# Advanced Placement American Government and Politics\*

Recommendation: 2.7/B or higher in previous Social Studies course and teacher recommendation 1 credit/full year Grades 11-12







This is a year-long study of the American political system. It will be an intensive, in-depth examination of the institutional and non-institutional factors that make the American government unique in the world. To better understand these factors, we will study the historical background which has influenced over two centuries of American political evolution. As you internalize the concepts taught in this course you will, in the short term, prepare to pass the national AP American/Comparative Government examination in May. More importantly, however, is the long term benefit. Our success as a democracy depends on your understanding of and participation in the government process. After all, freedom isn't free! NOTE: STUDENTS ARE REQUIRED TO TAKE THE AP EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.

### World Geography

.50 credit/1 semester Grades 11-12







This one semester course meets the state requirement for world studies. This course examines different countries and regions in the world incorporating the five themes of geography, which include Location, Region, Place, Movement, and Human Interaction. It is a hands-on course that utilizes computer inquiry and media resources, as well as primary source documents. Students will have a working knowledge of the themes and their application by the end of the course. Selection of the material to be examined is based on current events, interest, and time.

### **Honors World Geography**

Recommendation:: 2.7/B or higher in previous Social Studies class

.50 credit/1 semester

Grades 11-12







This course builds upon the five themes of geography to explore the earth and our role of stewardship of it. This exploration will utilize primary sources for analysis and recommendations, and cultural exploration. Students will address the issues of resource awareness, scarcity, and allocation; the impact of daily life decisions on the environment; troubleshooting, identifying, and recommending possible solutions to protect the planet. Ultimately, students will develop an appreciation for the physical components of the world and their place in it.

# HUMANITIES DEPARTMENT Interdisciplinary Courses

Humanities courses explore a specific period of history and culture through literature, the performing arts, and the fine arts. These courses apply towards Elective Credits required for graduation, or credit may be applied to English or Social Studies after student consultation with their classroom teacher and school counselor.

### **Days of Change and Challenge**

.50 credit/1 semester Grades 10-12



Days of change and challenges; a bi-disciplinary study of US history and culture of the 1960s and 1970s. This course examines the political, social and cultural trends, and milestone events throughout these sometimes tumultuous decades. Students will also study literature from the period to gain insight into ways authors' works are both a product of their times and a contributing influence upon them.

### **Sports in Society**

.50 credit/1 semester Grades 9-12



Sports has become an escape for some, an opportunity for others, and entertainment for many. *Sports in Society* examines the role of competitive athletics at all levels. This examination includes the following areas: the history of sports; the impact of sports on local, national, and international economies; the psychological and societal effects on communities of people and organizations. This course is offered by a recognized sports historian and published author.

# STEM DEPARTMENT Mathematics

**RHS** graduation requirements: Algebra I 1 credit and 2 elective math credits and a class in which math is applied. **State graduation requirements:** Algebra I 1 credit and 2 elective math credits and a class in which math is applied. 4th year math requirements meets the exposure requirements.

Pre-Algebra	Algebra I	Honors Algebra I	Honors Geometry
Algebra I	Geometry	Honors Geometry	Honors Algebra II
Geometry	Algebra II	Honors Algebra II	Honors Pre-Calculus
Advanced Mathematical Foundations	Quantitative Reasoning	Honors Pre-Calculus or Probability and Statistics	AP Calculus
Mathematics of Construction	Probability and Statistics or Trigonometry		

RHS requires that every student take three years of math and an additional year of math or non-math class in which mathematics is significantly applied. According to ED 306.27, a student can meet the requirement by satisfactorily completing a minimum of 4 courses in mathematics or by satisfactorily completing a minimum of 3 mathematics courses and one non-mathematics content area course in which mathematics knowledge and skills are embedded and applied, as may be approved by the School Board.

Non-math department courses that meet the fourth year math requirement are designated with the symbol in the course description.



### Pre-Algebra

Recommendation: Teacher Recommendation

1 credit/full year

Grade 9

Pre-Algebra Course Description: The goal of this course is to prepare students for success in Algebra I. This class will review the basic operations of arithmetic on whole numbers, fractions and decimals. These operations will be used in dealing with ratios, proportions, percents, simple geometry and algebra. As students master these basic concepts, they will move into basic algebra. Students will be expected to understand basic operations with integers, rational numbers, irrational, and real numbers; the use of variables; properties of numbers and of equality; solving equations and inequalities; problem solving; relations and functions; and polynomials.

### Algebra I

1 credit/full year Grade 9-10









Algebra I prepares students for post-secondary school, the work force, and life in the information age. Designed for self-directed learners, it combines manipulatives, technology, and hands-on activities to explore increasingly difficult mathematical content. Content topics include writing, solving, graphing, creating equations and inequalities, interpreting and using functions to model a variety of situations, and data analysis and probability. Formal proof and abstract concepts are a focal point of the course in preparation for higher level mathematics.

### Honors Algebra I

Recommendation: 2.7/B or higher in Eighth-Grade Math 1 credit/full year Grade 9









Honors Algebra I provides pacing and rigor for students who are self-directed learners. The units of study include: modeling with functions, linear functions, linear equations and inequalities in one variable, linear equations and inequalities in two variables, quadratic functions, and data analysis/statistics. By the end of the course, students should be able to apply properties of real numbers and use units to solve problems; create, simplify, and solve algebraic expressions and equations; create models using functions and interpret functions; and summarize, represent, and analyze data.

### Geometry

Recommendation: Honors Algebra I or Algebra I 1 credit/full year Grade 10









In Geometry, formal proof and abstract concepts are a focal point of the course in preparation for higher level mathematics. Students will explore Euclidean Geometry (plane geometry) to build capacity in logical thinking, spatial reasoning, and applying algebraic concepts learned in Algebra I to new situations. Units of study include linear and angular relationships, polygons with a focus of quadrilaterals and triangles, measurement and dimension, and circles. By the end of the course, students will be able to solve a variety of problems involving congruence and similarity, right triangles and trigonometry, measurement and dimension, and coordinate geometry.

### **Honors Geometry**

Recommendation: 2.7/B or higher in Algebra 1 1 credit/full year

Grade 9-10









Honors Geometry is designed for the self-directed learner as formal proof and abstract concepts are a focal point of the course in preparation for higher level mathematics. Students will explore Euclidean Geometry (plane geometry) to build capacity in logical thinking, spatial reasoning, and applying algebraic concepts learned in Algebra I to new situations. Units of study include linear and angular relationships, polygons with a focus of quadrilaterals and triangles, measurement and dimension, and circles. By the end of the course, students will be able to solve a variety of problems involving congruence and similarity, right triangles and trigonometry, measurement and dimension, and coordinate geometry. Pacing and in depth rigor distinguishes Honors Geometry from Geometry.

### Algebra II

Recommendation: Geometry 1 credit/full year Grades 10-11









Algebra II is designed to provide a continuation and extension of the concepts and applications provided in Algebra I. The units of study include: modeling with functions, linear systems of equations in two/three variables, linear systems of inequalities, quadratic functions, exponential growth and decay and probability and statistics. By the end of the course, students should be able to apply properties of real numbers and use units to solve problems; create, simplify, and solve algebraic expressions and equations; create models using functions and interpret functions; and summarize, represent, and analyze data.

### Honors Algebra II

Recommendation: 2.7/B or higher in Geometry and teacher recommendation 1 credit/full year Grades 10-11









Honors Algebra II is designed for self-directed learners as formal proof and abstract concepts are focal points of the course. The course provides an in-depth study of nonlinear functions. Content topics include linear programming, quadratic, and polynomial functions in both real and complex numbers, exponential, radical, rational functions and an in-depth study of functions and their properties. By the end of the course, students should be able to apply properties of real numbers and use units to solve problems; create, simplify, and solve algebraic expressions and equations; create models using functions and interpret functions; and summarize, represent, and analyze data.

### **Honors Pre-Calculus**

Recommendation: 2.7/B or higher in Algebra II and teacher recommendation 1 credit/full year Grade 11-12









Honors Pre-Calculus is designed for self-directed learners. Content topics include an in-depth study of trigonometry. Formal proof and abstract concepts are a focal point of the course in preparation for AP calculus and college mathematics. By the end of this course, students will be able to prove and apply trigonometric functions and identities, create and analyze functions, compute vector operations, and apply sequences, series and limits. Pacing and rigor distinguishes Honors Pre-Calculus from Pre-Calculus.

### **Advanced Placement Calculus AB**

Recommendation: 2.7/B or higher in Honors Pre-Calculus and teacher recommendation

1 credit/full year Grade 12









AP Calculus AB is a college mathematics course with an extremely demanding and fast-paced curriculum. It is designed to replace the first semester calculus course (calculus I) in college if a satisfactory grade is achieved on the AP exam. It provides a foundation in differential and integral calculus. The topics studied include methods of differential calculus, integral calculus, applications of derivatives, integrals and limits. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)

### **Probability and Statistics**

Recommendation: Algebra II .50 credit/1 semester Grades 11-12









This one-semester course will introduce students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data: Describing patterns and departures from patterns 2. Sampling and Experimentation: Planning and conducting a study 3. Anticipating Patterns: Exploring random phenomena using probability and simulation 4. Statistical Inference: Estimating population parameters and testing hypotheses. Topics included are permutations, combinations, conditional probability, confidence intervals, hypothesis testing, measures of central tendency and spread, linear regression, normal probability distribution, conditional probability and probability rules.

### **Trigonometry**

Recommendation: Algebra II .50 credit/1 semester Grade 11-12









This one-semester course is designed for the student who wants to pursue a STEM career but wants an alternative to Honors Pre-Calculus. Topics will include a complete review of right triangle trigonometry, a thorough exploration of unit-circle trigonometry, and an in-depth study of the trigonometric identities. Students could take a pre-calculus class after completing this course, or could go into a college Calculus 1 course.

### Quantitative Reasoning

Recommendation: Algebra 1 plus one additional math course. 1 credit/full year Grades 11-12









This course is designed to expose the student to a wide range of mathematics topics. Problem solving and critical thinking skills, along with the use of technology, will be emphasized and reinforced throughout the course as the student becomes actively involved in solving applied problems. Topics to be covered include Set Theory, Logic, Number Theory and Systems, Equations and Functions, Personal Finance, Geometry and Measurement, Probability and Statistics,

### **Advanced Mathematical Foundations**

Recommendation: Geometry 1 credit/full year Grades 11-12







This course is designed to ensure success in mathematics for students who plan to attend college. Topics covered are: operations with signed numbers; algebraic expressions; linear equations/inequalities; exponents; square roots; understanding and manipulating formulas; translating and solving word problems; interpreting and analyzing data; and graphing techniques. Emphasis will be placed on applying these skills in solving real work problems. This course can be a replacement for Algebra II.

### **Business Mathematics**

1 credit/full year Grades 9-12







This course teaches basic math skills for financial situations. Students will learn how to manage their money and their expenses while making financial and business decisions. Topics include calculating income; maintaining checking and savings accounts; understanding charge accounts, credit cards, and loans; vehicle costs; housing costs; insurance; and investments. This course will be of great value to both students who are interested in pursuing a college degree in business, and those who just want to gain a better understanding of how math will play a part of their everyday life.

### **Mathematics of Construction**

.50 credit/1 semester Grades 9-12





This one-semester course will explore the math behind the new construction of a 3-bedroom home in Raymond. Steps involved: Find a suitable lot, and get estimates for clearing. Design a home using some software (3-D Architect, for example). How much excavation is needed to prepare for the foundation? Estimate the amount of concrete to pour the foundation. What is concrete anyway, and what proportions of materials go into that. Estimate the amount of lumber to frame the house, plus labor costs for all other aspects: doors and windows, roofing, wiring, plumbing, HVAC estimates. Sheetrock estimates. Lighting, electrical outlets, cabinets. Paving costs for driveway. Design and estimates for septic systems, and describe the science of a septic system. Selling costs, including realtor fees, and mortgages. What would the asking price be? What salary would a prospective buyer need to afford such a house? This course is designed for students who are seeking real world applications for mathematics or a career in construction.

# STEM DEPARTMENT Science

RHS graduation requirements: Physical Science 1 Credit Biology 1 Credit, Elective Science 1 Credit

**State graduation requirements:** Physical Science 1 credit, Biology 1 Credit

Physical Science	Honors Physical Science	Honors Biology
Biology	Honors Biology	Honors Chemistry
Chemistry or Science Elective	Honors Chemistry or Science Elective	Honors Physics or Science Elective
Physics or Science Elective	Honors Physics or Science Elective	AP Biology, AP Chemistry, AP Physics, Science Elective

### **Physical Science**

1 credit/full year Grade 9







This course presents an application-oriented overview of the fields of physics, chemistry, and earth science. Basic skills involving measurement, graphing, the scientific method, metric measurements, and mathematical tools will be emphasized. The physics topics to be studied include motion, forces, energy, work, waves, sound, light, magnetism, and electricity. Chemistry topics will include the study of the properties and classification of matter, basic atomic structure, the periodic table and families of elements, bonding, and chemical reactions. Earth science topics to be covered will include astronomy and plate tectonics. Students will develop the skills of scientific problem solving and critical thinking. Laboratory experiments will stress safe laboratory practices, proper observation and reporting methods, and the application of concepts acquired through class activities. Current events will be discussed and connected to the curriculum.

### **Honors Physical Science**

Recommendation: 2.7/B or higher in previous Science course 1 credit/full year Grade 9









This course is fast paced and demanding. Students must demonstrate proficiency with skills involving measurement, graphing, the scientific method, metric measurements, and the application of mathematical formulas. Physics topics include the study of motion, forces, work, energy, waves, sound, light and color, and magnetism. The chemistry of matter describes how matter is structured, how atoms form molecules, and how molecules make up the matter in our physical environment. Chemistry topics will include the study of atomic structure, the periodic table, and the behavior of matter, chemical reactions and equations, acids and bases, and an overview of nuclear energy. Emphasis will be placed on research projects and laboratory activities.

# **Biology**

Recommendation: Physical Science 1 credit/full year Grade 10









This course will involve a detailed study of cell biology, biochemistry, DNA, and genetics. The history of life and evolution will be related to current systems of classification. The human nervous, endocrine, and immune systems will be studied and related to homeostasis. Ecology will focus on the interactions of organisms with their environments, the structure of ecosystems, photosynthesis and respiration, and biogeochemical cycles. Laboratory experiences are student centered and require the application of scientific principles acquired in class. Detailed laboratory reports are an essential part of the laboratories and will focus on scientific methods. A significant amount of memory work is involved due to a detailed study of biological vocabulary.

# **Honors Biology**

Recommendation: 2.7/B or higher in previous Science course and teacher recommendation

1 credit/full year Grades 9-10









This fast-paced and in depth biology course will involve a detailed study of cell biology, biochemistry, DNA, and genetics. The history of life and evolution will be related to current systems of classification. The human nervous, endocrine, and immune systems will be studied and related to homeostasis. Ecology will focus on the interactions of organisms with their environments, the structure of ecosystems, photosynthesis and respiration, and biogeochemical cycles. Laboratory experiences are student centered and require the application of scientific principles acquired in class. Detailed laboratory reports are an essential part of the laboratories and will focus on scientific methods. A significant amount of memory work is involved due to a detailed study of biological vocabulary. This course is intended to prepare students for Honors Chemistry, and is strongly recommended for students who are self-directed learners.

# **Advanced Placement Biology**

Recommendation: 2.7/B or higher in previous Honors Science course and teacher recommendation 1 credit/full year Grades 11-12









This course is designed to be equivalent to a college level introductory biology course usually taken by biology majors during their first year. It aims to provide students with the conceptual framework, factual knowledge, and analytical skills necessary to deal critically with the rapidly changing science of biology. Primary emphasis is on developing an understanding of concepts. Essential to this conceptual understanding are the following: a grasp of science as a process rather than as an accumulation of facts; personal experience in scientific inquiry; recognition of unifying themes that integrate the major topics of biology; and application of biological knowledge and critical thinking to environmental and social concerns. The major topics of study include the chemistry of life, cells, cellular energetics, heredity, molecular genetics, and evolutionary biology. The diversity of organisms will be explored through evolutionary patterns and relationships, and the structure and function of plants and animals. The ecological component of this course incorporates the study of populations, communities, ecosystems, and global issues. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)

### Chemistry

Recommendation: Biology 1 credit/full year Grades 11-12









This course will involve a detailed study of the structure, composition, and properties of matter, as well as the theories behind their conception. An appreciable amount of memory work is involved including formulas for word problem solving skills. A strong background in metrics, scientific notation and manipulation of formulas is essential. A solid foundation of Algebra manipulation is necessary. Students will demonstrate specific laboratory techniques requiring the application of principles acquired through lecture. Formal laboratory reports are required. A calculator is required for this course.

# **Honors Chemistry**

Recommendation: 2.7/B or higher in previous Science course and teacher recommendation

1 credit/full year Grades 10-12









This course will involve a detailed study of the structure, composition, and properties of matter, as well as the theories behind their conception. An appreciable amount of memory work is involved including formulas for word problem solving skills. A strong background in metrics, scientific notation and manipulation of formulas is essential. A solid foundation of Algebra manipulation is necessary. Students will demonstrate specific laboratory techniques requiring the application of principles acquired through lecture. Formal laboratory reports are required. A calculator is required for this course. Pacing and rigor will be more intense in Honors Chemistry.

# Advanced Placement Chemistry

Recommendation: 2.7/B or higher in previous Honors Science course and teacher recommendation

1 credit/full year Grades 11-12









Advanced Placement Chemistry is a course that focuses on the inquiry-based learning of essential concepts, and reasoning skills necessary to engage in science practices used throughout the study of A.P. Chemistry rather than factual recall. It is the equivalent of a first-year college general chemistry course. The course is designed to promote enduring conceptual understandings of the A.P. Chemistry content that supports these ideas. The course is taken with the expectation that students will take the A.P. exam to receive college credit or placement at the student's college of choice. Students can expect to spend a minimum of 25 percent of class time performing at least 16 hands-on lab investigations to support the learning objectives in the curriculum framework. Additionally, a minimum of six of the 16 lab investigations will include a guided inquiry-based component. The result will be readiness for the study of advanced topics in subsequent college courses. (Adapted from the College Board A.P. Chemistry Framework 2014.) NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)

### **Physics**

Recommendation: 2 years of Science 1 credit/full year Grades 11-12







The purpose of this course is to apply physics concepts to explain phenomena that students have observed in the everyday world. The primary emphasis is on comprehension rather than computation. Topics will include the study of various kinds of motion, forces, energy, sound, light, electricity, and magnetism. Students will be expected to use algebraic skills for some math computations. However, there will not be a heavy reliance on formula usage. Students will perform laboratory experiments that reinforce concepts. Developing the skills of collecting, organizing, and analyzing data will be emphasized. Students will be expected to demonstrate problem-solving strategies involving self-designed activities and demonstrations using common materials.

# **Honors Physics**

Recommendation: 2.7/B or higher in previous Science course and teacher recommendation

1 credit/full year Grades 11-12









This course will involve a detailed study of motion, forces, work, energy, momentum, sound, light, magnetism and electricity. A very strong background in metrics, scientific notation, significant digits and manipulation of formulas is essential. A solid foundation of Algebra manipulation is necessary. Formulas need to be memorized for tests. Laboratory experiences are student centered and require the application of principles acquired in class. Formal laboratory reports are required involving many precise calculations. This course is strongly recommended for students who are self-directed learners. A calculator is required.

### Advanced Placement Physics I

Recommendation: 2.7/B or higher in previous Honors Science course and teacher recommendation 1 credit/full year Grades 11-12









This fast-paced course covers mechanics, work, energy and power, waves including sound and light, and simple circuits. Students should have strong math, critical thinking, and reasoning skills and be concurrently enrolled in Honors Pre-Calculus or AP Calculus. Students should be independent learners and enjoy solving problems that combine a variety of physical concepts. Laboratory investigations will be a major part of the class and students will have to be able to design their own experiments and analyze and defend their results. NOTE: STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)

#### **Environmental Science**

Prerequisite: Biology 1 credit/full year Grades 10-12







Environmental Science will focus on merging the sciences, and introducing a way of looking at science from a social science perspective. Topics will include the study of ecology, land and air based chemistry, natural resources, thermodynamics, and the local, national, and global effect humans have on earth. The course will be "deeply rooted" in analyzing scientific data related to the environment in order to learn how the world works, and to assess the impact humans have on Earth. Students will be expected to be active participants in discussions, and to practice and teach sound environmental choices to others in the community. Organizational skills, a cooperative team attitude, and a productive and independent learning style are a must. Fieldwork will be done to collect and analyze water and soil samples, identify flora and fauna, and participate in a variety of other activities. This course is strongly recommended for those students who are thinking of pursuing a postsecondary program of study leading to a career, which may be affected by environmental issues.

#### **Human Anatomy & Physiology**

Prerequisite: Biology

Recommendation: Chemistry

1 credit/full year Grades 11-12









The purpose of this course is to provide a detailed study of the structure and function of all of the human body systems. Disorders and diseases associated with the systems will be emphasized. Scientific anatomical terminology will be applied to diagrams, models, and dissection specimens. The dissection of the fetal pig or cat will be used to reinforce the anatomy of the human body systems. The skills of scientific problem solving, critical thinking, laboratory observations, and reporting techniques will be emphasized. Students will be expected to apply lecture concepts to all laboratory work.

#### **Botany**

Prerequisite: Biology .50 credit/1 semester Grades 10-12









The purpose of this course is to provide an overview of evolution, structure, and functions of all the major plant groups. Algae, fungi, mosses, ferns, and flowering and non-flowering plants will be identified with pictures, slides, and live specimens. The structure and function of roots, stems, and leaves will be studied and reproduction will be emphasized. Labs include plant identification, comparison, and drawing as well as fern fertilization and angiosperm dissection. The skills of scientific problem solving, critical thinking, laboratory observations, and reporting techniques will be emphasized. Students will be expected to apply lecture concepts to all laboratory work.

# Zoology

Prerequisite: Biology .50 credit/1 semester Grades 10-12









This course will provide an introduction to the classification, structure, and function of animals. Invertebrate studies will include an overview of the simplest invertebrates, worms, mollusks, arthropods, and echinoderms. Vertebrate studies will include a comprehensive examination of amphibians, reptiles, birds, and mammals. The skills of scientific problem solving, critical thinking, laboratory observations, and reporting techniques will be emphasized. Students will be expected to apply lecture concepts to all laboratory work. Field studies and dissections of representative animals will be conducted.

# Astronomy

Recommendation: Physical Science .50 credit/1 semester Grades 11-12









The purpose of this course is to gain an understanding about our solar system, our galaxy, and the universe. The history of astronomy will be introduced, the concepts of modern astronomy will be reviewed, and the methods astronomers use to learn about the universe will be studied. Laws of motion and gravity will be applied to the movement of celestial bodies. Online tools will be used and current events will be discussed. Students will be expected to work collaboratively and independently on labs, activities, and projects. A relevant field trip will be an integral part of the curriculum.

#### **Earth Science**

Recommendation: Physical Science .50 credit/1 semester Grades 11-12









The purpose of this course is to study the world we live in. The emphasis will be on the topics of geology (the study of rocks, volcanoes, earthquakes, and plate tectonics); meteorology (climate, weather, and atmosphere); and oceanography (water systems and oceans). Our impact on the earth and its future will be highlighted. We will also cover natural disasters and related topics and the ways in which they affect the world around us. Students will be using laboratory kits, virtual labs, online resources, and a textbook. Students will be expected to work collaboratively and independently on labs, activities, and projects. A relevant field trip will be an integral part of the curriculum.

# SPECIAL EDUCATION

The Raymond School District complies with all State and Federal regulations in offering a "free appropriate public education" to all students residing in Raymond who are identified as having one or more educational disabilities\*. In an effort to ensure that all students are challenged to excel as lifelong learners, to progress within the regular education curriculum, and to be college and career ready, Raymond High School's Special Education Department incorporates:

- Support services and specialized instruction to enhance a student's individual performance, as well as access to/success within the general curriculum and/or instructional settings;
- The development and refinement of social, interpersonal, and behavioral skills needed to function effectively in the school setting, social milieu, and society;
- Tools to promote and strengthen advocacy strategies;
- Effective data collection systems that support the provision of quality educational services;
- Transition planning to facilitate a smooth progression from school to post-graduate opportunities;
- Ongoing collaboration between school staff, the student and family, and community agencies as appropriate;
- The dissemination of information on special education rules, regulations, professional development activities, and promising practices.

In the event that an RHS IEP team agrees that the degree of specialized instruction and supports needed to address a student's individual needs, abilities, and goals warrants enrollment in alternative special education courses, and the pursuit of a Certificate of Completion\*, a variety of courses are available through the Special Education Department.

\*Additional information regarding eligibility for special education services or a Certificate of Completion is available upon request.

# Reading & Writing Development I & II

Requirement: IEP Team Approval 1 credit/full year Grade 9-10

Incorporating informational text, in addition to specialized and evidence-based instructional methods and materials, Informational Reading and Writing Development I & II further advance a student's reading decoding and comprehension skills, as well as receptive and expressive communication skills. <u>NOTE</u>: These courses are an alternative to World Literature and American Literature if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# Informational Reading & Writing Development I & II

Requirement: IEP Team Approval 1 credit/full year Grade 11-12

Incorporating informational text, in addition to specialized and evidence-based instructional methods and materials, Informational Reading and Writing Development I & II further advances a student's reading decoding and comprehension skills, as well as receptive and expressive communication skills. <a href="MOTE">MOTE</a>: This course is an alternative to English electives. if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

#### Foundations of Math I & II

Requirement: IEP Team Approval

1 credit/full year Grade 9-10

Incorporating specialized and evidence-based instructional methods and materials, Foundations of Math I & II advances a student's competencies in relation to numbers and operations, measurement and data, geometry, and algebraic thinking. NOTE: These courses are an alternative to Pre-Algebra and Algebra if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

#### Consumer Math I & II

Requirement: IEP Team Approval 1 credit/full year

Grade 11-12

With an emphasis on the math skills required for employment and independence, and the incorporation of specialized and evidence-based instructional methods and materials, Consumer Math I and II advance a student's competencies in relation to numbers and operations, measurement and data, geometry, and algebraic thinking. <a href="NOTE">NOTE</a>: These courses are an alternative to math electives if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# About My Community I & II

Requirement: IEP Team Approval
.50 credit/1 semester
Grade 9-10

Incorporating specialized and evidence-based instructional methods and materials, About My Community I & II advances a student's knowledge of his/her home, school, and local communities. As appropriate, individualized instruction may also expand to increase knowledge of NH and the United States. Periodic actual or virtual trips into Raymond will occur. NOTE: These courses are an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# Exploring My Community I & II

Requirement: IEP Team Approval
.50 credit/1 semester
Grade 11-12

Incorporating specialized and evidence-based instructional methods and materials, Exploring My Community I & II further advance a student's knowledge of his/her home, school, and local communities. As appropriate, individualized instruction may also expand to increase knowledge of NH and the United States. Periodic actual or virtual trips into Raymond and surrounding communities will occur. NOTE: These courses are an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# My Rights & Responsibilities

Requirement: IEP Team Approval
1 credit/full year
Grade 11 or 12

Incorporating specialized and evidence-based instructional methods and materials, My Rights & Responsibilities advances a student's knowledge of his/her rights and responsibilities upon turning 18 and beyond, (i.e., voting, guardianship, taxes, FERPA, disclosure of disability, Armed Services registration, medical and money management). Periodic actual or virtual trips into Raymond and surrounding communities will occur. <a href="NOTE">NOTE</a>: This course is an alternative to the social studies courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# Studying Science I & II

Requirement: IEP Team Approval 1 credit/full year Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Studying Science I & II advances a student's knowledge of the essential elements of physical science, life science, and Earth/space science. Periodic actual or virtual science-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the science courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion.

# Science in My Life

Requirement: IEP Team Approval .50 credit/1 semester Grade 11 or 12

Incorporating specialized and evidence-based instructional methods and materials, Science in My Life advances a student's knowledge of the impact of physical science, life science, and Earth/space science on his/her own life. Periodic actual or virtual science-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the science courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

#### Art for Me I & II

Requirement: IEP Team Approval .50 credit/1 semester Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Art for Me I & II advances a student's enjoyment and appreciation of art in his/her own life. Periodic actual or virtual art-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the Fine and Performing Art courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# Technology for Me

Requirement: IEP Team Approval .50 credit/1 semester Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Technology for Me advances a student's knowledge of the technology s/he uses to access the curriculum, express him/herself, regulate, and/or support executive functioning. <a href="NOTE">NOTE</a>: This course is an alternative to the ICT courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# **Healthy Habits I-IV**

Requirement: IEP Team Approval .50 credit/1 semester Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Healthy Habits I-IV advances a student's knowledge of his/her own health/wellness needs, habits, and responsibilities. Periodic actual or virtual health-related experiences may occur. NOTE: These courses build upon each other, while remaining individualized, and are an alternative to the Physical Education and Health courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

#### My Fitness I & II

Requirement: IEP Team Approval .50 credit/1 semester Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, My Fitness I & II advances a student's knowledge of his/her own fitness needs, habits, and options. Periodic actual or virtual fitness-related experiences may occur. <a href="NOTE">NOTE</a>: These courses build upon each other, while remaining individualized, and are an alternative to the Physical Education and Health courses required for graduation if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

#### Skill Building

Requirement: IEP Team Approval .50 credit/1 semester Grade 9-12

Skill Building enables a student to address individualized educational access needs through the provision of a variety of related or special education services. <u>NOTE</u>: This course can be repeated.

# **Achieving Academic Success**

Requirement: IEP Team Approval 1 credit/full year Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, as well as a student's course materials and assignments, Achieving Academic Success advances a student's executive functioning skills, (i.e., time management, study, test-taking, and organizational skills). <u>NOTE</u>: This course is <u>not</u> designed to be an assignment completion, resource, or study period, but rather one in which evidence-based learning strategies are acquired and applied. This course can be repeated.

# Finding a Career I & II

Requirement: IEP Team Approval 1 credit/full year Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Finding a Career I & II advances a student's knowledge of a variety of career fields while assisting him/her to identify career paths to explore further. Periodic actual or virtual career exploration experiences will occur. NOTE: These courses build upon each other, while remaining individualized, and are available only if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

#### Career Skills I & II

Requirement: IEP Team Approval 1 credit/full year Grade 9-12

Incorporating specialized and evidence-based instructional methods and materials, Career Skills I & II advances a student's knowledge of his/her own career interests, aptitudes, and abilities. Periodic actual or virtual career exploration experiences will occur. NOTE: These courses build upon each other, while remaining individualized, and are available only if a student has been determined eligible to pursue a Certificate of Completion and can be repeated.

# Indep. Study - Transitioning to Adult Life I & II

Requirement: IEP Team Approval 1 credit/full year\* Grade 12+

Transition to Adult Life I & II are courses designed for the 18-21 year old student who is pursuing a Certificate of Attendance and striving to meet benchmarks required to achieve post-secondary goals. Daily actual or virtual community-based instructional and exploration experiences will occur. NOTE: These courses build upon each other, while remaining individualized, and are only appropriate if a student has been determined eligible to pursue a Certificate of Completion and can be repeated. \*Credit assignment is determined based on the hours of programming and determined by administration.

# **Physical Education & Health**

**RHS** graduation requirements: Physical Education 1 credit. Health .50 credit State graduation requirements: Physical Education 1 credit, Health .50 credit

A student who participates in 2 sports in a school year can earn .50 credit waiver towards their Physical Education Requirement. Students can earn up to a maximum of 1.00 credit waiver for Physical Education. Students must fill out P. E. Waiver Form in the School Counseling Office.

# Physical Education IA

.50 credit/1 semester Grades 9-12



Physical Education IA Semester 1 will be offered in the fall. It is designed for students who are interested in team sports and individual sports. Units will include conditioning, flag football, ultimate Frisbee, basketball, health fitness, racket sports, and volleyball.

Physical Education IA Semester 2 will be offered in the spring semester. It is designed for students who are interested in team and individual sports. Adventure Education will be the 1<sup>st</sup> unit of the spring semester. Adventure Education emphasizes team building, problem solving, and confidence building. Highlights of this unit will include a low and high ropes course as well as a climbing wall. Other units will be softball, orienteering, floor hockey, and soccer.

# **Physical Education IB**

.50 credit/1 semester Grade 9-12



Physical Education 1B Semester 1 will be offered in the fall semester. It is designed as an introductory course for students who are looking to establish a healthier lifestyle. Units will include: golf, walking, bowling, flag football, recreational volleyball, basketball, health fitness, and yoga.

Physical Education IB Semester 2 will be offered in the spring semester. Adventure Education will be the 1<sup>st</sup> unit of the spring semester. Adventure Education emphasizes team building, problem solving, and confidence building. Highlights of this unit include a low and high ropes course and a climbing wall. Other units will include softball, floor hockey, and soccer.

#### Health

.50 credit/1 semester Grade 9-12



Health education provides students with subject matter and learning activities necessary for the acquisition of knowledge, attitudes, appreciations, and behaviors essential to the growth, development, and wellbeing of each individual. Topics will include: nutrition, substance use and abuse, sexually transmitted diseases, fitness and current health topics.

# Physical Education II

Recommendation:: Physical Education I or 2 PE Waivers

.50 credit/1 semester

Grades 10-12



Physical Education II is an elective course open to students who wish to participate in an advanced physical education course. Emphasis will be placed on lifetime activities, but team sports will also be covered. Activities will include: golf, ultimate Frisbee, flag football, health fitness, lacrosse, basketball, and racket sports.

# **Physical Education III**

Recommendation: Physical Education I or 2 PE Waivers .50 credit/1 semester Grades 10-12



Physical Education III is an elective course open to students who wish to participate in an advanced physical education course. Emphasis will be placed on lifetime activities, but team sports will also be covered. Activities include: Adventure Education, volleyball, softball, team handball, and soccer.



# **Integrated Computer Technology (ICT)**

RHS graduation requirement: 1 Credit State graduation requirement: .50 Credits

ICT courses are designed so that students have flexibility in choosing computer courses.

\*Courses offered during school years beginning with an even number.

\*\*Courses offered during school years beginning with an odd number.

# **Digital Components & Research**

.50 credit/1 semester Grades 9-12





Digital Components & Research is a foundational course that allows students to explore how a computer functions through navigation of hardware and software introductions to chrome, Microsoft, and Google platforms. Students explore how a personal computer perpetuates communication, research and decision making through individualized career pathways, workplace needs, and household management. Topics include graphics, hardware, software, communication applications, data integration, cyber security topics. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

# Computer Programming I\*

.50 credit/1 semester Grades 9-12







Computer Programming I is a foundational S.T.E.M. course designed around "Top Down Design methodology to develop the logical thinking, syntax knowledge, and problem solving skills necessary to create both effective and efficient computer programs. Topics include variable types, variables, operators, methods, conditionals, loops, and debugging. Readability, convention, style, and documentation of programs are assessed through authentic performance assessment tasks that address department competencies and adhere to current standards.

# Computer Aided Design (CAD) Integration\*\*

.50 credit/1 semester Grades 10-12







Computer Aided Design (CAD) Integration, a S.T.E.M. course, is designed to introduce students to CAD software, where 3 dimensional designs will be developed, refined, and 3D printed. All skills and basic knowledge are transferable to a variety of CAD and slicing platforms. Many geometrical and algebraic concepts are explored and applied in the context of "intentional design." Students will learn to implement and streamline the design, development, and print processes for workflow through authentic performance assessment tasks that address department competencies and adhere to current standards.

#### Game Development I\*\*

.50 credit/1 semester Grades 9-12







Game Development, a S.T.E.M. course, is designed to introduce game design principles using code.org's Game Lab and portions of the Computer Science Discoveries Course curriculum, accessible from most major devices. Fundamental concepts include "Top Down Design," variables, randomization, sprites, loops, conditionals, user input, and complex movement. Many geometrical and algebraic concepts are explored and applied in the context of "intentional design." The game design process is also used when creating interactive scenes as students work towards creating their own games. Product development is assessed through authentic performance assessment tasks that address course competencies and adhere to current standards.

# **Computer Science Principles**

1 credit/full year Grades 10-12







Code.org Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

This course was designed with the beginner in mind, so no prior experience in computers or programming is necessary to be successful in this course.

# Advanced Placement Computer Science Principles (AP CSP)

1 credit/full year Grades 10-12







Code.org Computer Science Principles (CSP) curriculum is a full-year, rigorous, entry-level course that introduces high school students to the foundations of modern computing. The course covers a broad range of foundational topics such as programming, algorithms, the Internet, big data, digital privacy and security, and the societal impacts of computing. Code.org is recognized by the College Board as an endorsed provider of curriculum for AP® Computer Science Principles (AP CSP). This endorsement affirms that all components of Code.org CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessment.

This course was designed with the beginner in mind, so no prior experience in computers or programming is necessary to be successful in this course. It may also be taken as a non AP or AP course. NOTE: AP STUDENTS ARE REQUIRED TO TAKE THE A.P. EXAM IN MAY. PLEASE REFER TO THE LETTER ON PAGE 14. (Students experiencing financial hardship should speak to their school counselor.)

# Cybersecurity

1 credit/full year Grades 10-12







This course is a full-year, rigorous, entry-level course that introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

#### Introduction to Robotics\*

.50 credit/1 semester Grades 9-12







Introduction to Robotics, a S.T.E.M. course, is designed to allow an opportunity to merge code and machine. No prior experience is necessary. Daily opportunities are presented to develop creativity, problem solving, logical thinking, iterative process, and collaboration. Foundational concepts will include the impact of robots on society, machine learning and AI, and issuing commands to a robot.. All topics are assessed through authentic performance assessment tasks that address department competencies and adhere to current industry standards.

# **Fine & Performing Arts**

RHS graduation requirement: .50 credit State graduation requirement: .50 credit

Note: Participation in music courses may result in participating in activities during the school day which will cause students to miss class time in other subjects. The students are responsible for all work missed as a result of these related activities. All music courses meet the graduation requirements for Fine and Performing Arts.

#### Art I

.50 credit/1 semester Grades 9-12



This course explores various forms of two and three dimensional art in a wide variety of art materials, processes, and styles. You will draw, paint, and create sculptural objects that are your own personal expression. This course is designed for students of all abilities and fulfills the basic art requirement. Come discover yourself and have fun doing so.

# Drawing I

Recommendation: Art I or teacher permission .50 credit/1 semester Grades 9-12



When you ask any high school student what art skills that they would like to improve on, most will say that they'd like to draw better. This course is designed to do just that. You will be taught to gesture, sketch, add interest and expression to your lines, draw accurate proportions, shade, and develop interesting compositions. There will be observational drawing as well as cartooning.

#### Drawing II

Prerequisite: Drawing I .50 credit/1 semester Grades 9-12



Drawing II is for students that want to go beyond drawing basics and create drawings that are designed to impress. You'll experiment more with texture, pattern, and creating life like shading to jump your work from the page. Your work will have a finished quality that can only come with time and attention. You'll also have a chance to design your own project. Drawing II will immediately follow Drawing I in your schedule so that you can continue your growth as an artist.

# Painting I

Recommendation:: Art I or teacher permission

.50 credit/1 semester Grades 9-12



Students taking painting will use a variety of painting media including acrylics, watercolor, and pastel. You will work on still life, portraits, and landscape painting. You will learn how to mix colors, create accurate values and color harmony, apply paint, and set up dynamic compositions.

# Painting II

Prerequisite: Painting I .50 credit/1 semester Grades 9-12



Similar to Drawing II, this course offers students that want to get even better at painting an opportunity to continue growing as artists. It will be an opportunity to develop your expression beyond the basics, and you'll have a chance to develop a project that you would really like to do. In addition to the other painting media, you'll also be introduced to oil paint.

#### **Pottery**

Recommendation: Art I .50 credit/1 semester Grades 9-12



Students will work on hand building techniques such as pinch, coil, slab, and draped forms, as well as throwing pots on the wheel. In addition, you will learn to decorate the surface of your piece by adding texture, pressing or carving texture, as well as glazing (painting) techniques. You will create functional pottery such as bowls and dishes, as well as sculptures out of clay. If you have had pottery before, and want to continue developing your skills, you can have advanced credit coursework in this time period. Please see the Art Teacher for details.

# **Cultural Arts Workshop**

Recommendation: Art I .50 credit/1 semester Grades 9-12



As a cultural arts workshop student, focus will be placed on handicrafts that are rooted in cultural traditions such as mask making, metal embossing, clay sculpture, silk painting, leatherwork, jewelry making, and tiles. Students will learn about design, color harmony, and style as well as creating pieces of art that will be treasured for years to come.

#### **Open Studio**

Recommendation: Art I and one additional art course or teacher permission upon portfolio review .50 credit/ 1 semester Grades 9-12



Students in this will have a choice of medium and subject matter that they wish to pursue. Along with the guidance of the instructor, the student will decide their subject matter as well as the mediums of choice to create their artwork. A plan of action will be developed with the teacher's help. Area of interest could include things like cartooning, calligraphy, animations, graffiti, abstract art, mixed media, anime, etc. Where do your interests lie? It's all about choice!

**Open Studio II**Prerequisite: Open Studio I
.50 credit/1 semester Grades 10-12



Open Studio Workshop II is a continuation of Open Studio Workshop I. Students are responsible for the design and implementation of their own curriculum. A pre-planning worksheet shared with the teacher is required for each of the six projects. Various media, subject matter and techniques can be explored.



# MUSIC Concert Band

This is a program open to all students with a desire to learn/continue their education on a concert band instrument. Students must have their own instruments or have prior permission from the instructor to perform on a school owned instrument. **Participation in the Marching Band is required.** 

Works suitable for symphonic performance are rehearsed, studied, and publicly performed. In addition to presenting formal concerts, the ensemble performs for school and community functions, and informal presentations. Students are especially encouraged to participate in various state and regional events, such as New Hampshire All-State Music Festival, Solo and Ensemble Festival, etc. **Out-of-school time is required for rehearsals and/or performances**.

Preparing music through practice at home and individual performance of passages (through electronic recording or in person) is required. Rehearsal and performance attendance is mandatory.

### **Concert Band I**

1 credit/full year Grades 9-12



Freshmen with prior instrumental experience at the middle school level and/or freshmen through seniors with no prior instrumental experience.

#### **Concert Band II**

Recommendation: Completion of Concert Band I or band director's recommendation. 1 credit/full year Grades 10-12



#### **Concert Band III**

Recommendation: Completion of Concert Band II or band director's recommendation. 1 credit/full year Grades 11-12



#### **Concert Band IV**

Recommendation: Completion of Concert Band III or band director's recommendation. 1 credit/full year
Grade 12



# **Raymond Singers**

This is a program open to all students, however, voice placement auditions will be held. Choral works in the style of folk, classical, semi-classical, jazz, and pop are studied and performed. The course strives to cultivate the fundamental principles of singing through the study of tone production, resonance, breath control, diction, and voice care. Special emphasis will be placed on music reading and basic musicianship. Students are especially encouraged to participate in various state and regional events, such as New Hampshire All-State Music Festival, Solo and Ensemble Festival, etc. **Out-of-school time is required for rehearsals and/or performances, including certain school holidays.** Preparing music through practice at home and individual performance of passages (through electronic recording or in person) is required.

# Raymond Singers I

1 credit/full year Grades 9-12



Freshmen with prior choral experience at the middle school level and/or freshmen through seniors with no prior choral experience.

# Raymond Singers II

Recommendation: Completion of Raymond Singers I or choir director's recommendation. 1 credit/full year Grades 10-12



# Raymond Singers III

Recommendation: Completion of Raymond Singers II or choir director's recommendation. 1 credit/full year Grades 11-12



#### Raymond Singers IV

Recommendation: Completion of Raymond Singers III or choir director's recommendation. 1 credit/full year
Grade 12





#### Guitar I

.50 credit/1 semester Grades 9-12



Guitar I is open to all students regardless of proficiency on the guitar. Although the class is designed primarily for beginners, advanced guitarists are welcome to take this course with the approval of the instructor. Students will learn to read music notation, chord playing, basic guitar theory, guitar tablature and various musical styles. These include blues, rock, jazz, classical and folk. Students are required to have their own guitar for this class. Preparing music through practice at home and individual/small group performance of pieces (through electronic recording or in person) is required.

#### **Guitar Ensemble**

Recommendation: Successful completion of all Guitar I competencies; Student must provide their own acoustic/classical style guitar



.50 credit/1 semester Grades 10-12

Guitar Ensemble encourages any student interested in continuing to improve his/her musical abilities to get involved in this ensemble experience for guitars only. The course continues to emphasize and develop music competencies associated with literacy fundamentals, basic music theory, and performance techniques acquired in Guitar I. Individuals will develop performance and instrumental skills as the ensemble studies quality guitar literature from multiple styles and genres. Participation in periodic public performances is required. This course can be repeated for an elective credit.

# **Progressive Styles**

Recommendation: Teacher permission .50 credit/semester Grades 9-12



Progressive Styles is a contemporary music performance and production workshop. The purpose of this course is to give students a chance to compose, arrange, and perform music that is not usually studied in a traditional band or chorus setting. One of two main class goals will be to create or arrange several original or covered compositions, using any combination of rock and/or classical instruments, in a style that is in line with modern rock, blues, reggae, progressive, and/or alternative genres. Students will learn how to write lead sheets in order to preserve composition formats. The second class goal will be to perform this music in a live setting. Students who don't sing or play an instrument could work as sound engineers, light engineers, or in an entertainment production/marketing capacity once trained. This course can be repeated for an elective credit.

#### Advanced Musicianship

Recommendation: Concert Band I & II; or Raymond Singers I & II; teacher recommendation .50 credit/1 semester Grades 11-12



Advanced Musicianship is designed for students that will be furthering their music education in a post secondary environment or those that are participating in the NH All-State audition process. It is designed to prepare students for either audition process and theory placement evaluations that are required as part of those two processes. Students will be required to prepare music from corresponding solo literature to add to their performance repertoire. Upon completion of prepared material, a jury of music

educators will assess and provide feedback on the performance. Upon approved completion of the jury process, the student will then be required to publicly perform the material in a recital or concert setting. Credit will not be awarded until completion of performance. Students will also be required to master the skills & concepts necessary to successfully complete a college music theory placement exam. Heavy emphasis will be on ear-training and fundamentals of harmony. Offered 1st semester only. This course can be repeated for an elective credit.

#### **RHS Drumline**

.50 credit/1 semester Grades 9-12



RHS Drumline is open to all students regardless of musical proficiency. Students will learn to read marching percussion notation, basic marching percussion rudiments, techniques of ensemble playing, and various in the marching percussion genre. Special emphasis will be placed on music reading and basic musicianship. Students are required to have their own sticks and mallets for this class (can be purchased through the instructor). Preparing music through practice at home and individual/small group performance of pieces (through electronic recording or in person) is required.

# **Topics in Contemporary Popular Music**

.50 credit/1 semester Grades 9-12



Topics in Contemporary Popular Music is a course designed to explore the issues and controversies associated with current popular music in America. Topics covered are but are not limited to: Lyrical content- appropriate or not and who decides?, Copyright infringement-is downloading without permission okay?, Who determines what consumers listen to- do you really have a choice?, America's Got The Voice Idol- Does the industry really care if you make it or not? This is a hands-on and project based class. Parental Notice- This course will explore the lyrical content of today's popular music and at times can be mature in nature. Please be advised that if your student enrolls in this course that you and your student are acknowledging and accepting the responsibilities associated with covering mature thematic material.

# Live Sound and Studio Recording

.50 credit/1 semester Grade level: 9-12



This is an introductory course in basic design and operation of live sound equipment and studio recording software and hardware. Students will demonstrate the fundamental skills to reinforce live music performances and the ability to produce and record performances both live and in a multi-track situation. Students will be exposed to and use all techniques and systems currently in use in the music industry. Want to record a song or create a podcast? This class is for you. Students should be computer literate and have a solid knowledge of basic math concepts. After school time will be required in order to fulfill course competencies.

# **Business Education**

# **Accounting I - Introduction to Principles**

.50 credit/1 semester Grades 9-12





This is an introductory course designed to teach students the basic concepts applied in financial record keeping. The emphasis is on precision and deductive reasoning as students learn skills such as how to record monthly business transactions and how to summarize and report financial information for a service business organized as a proprietorship. Students spend much of their time working cooperatively on accounting problems and they will gain experience that will help them to be successful in demanding college accounting courses, in office work, and in managing their own small businesses. These skills are necessary for any student planning to major in any business concentration in college.

# Accounting II - Corporate Accounting

Prerequisite:: Accounting I .50 credit/1 semester Grades 9-12





This course is a continuation of the Accounting I course and is meant to increase competency in the keeping of books for the more complicated organizations of a merchandising business. Students will continue to explore the accounting cycle as it relates to a merchandising business organized as a corporation. The emphasis is on using special journals, subsidiary ledgers, payroll records, dividends, and taxes. This course will further prepare students choosing to enter a business major at the college level.

# Accounting III - Advanced Concepts

Prerequisite: Accounting II .50 credit/1 semester Grades 10-12





This course is a continuation of Accounting II course with emphasis on advanced accounting topics such as uncollectible accounts, plant assets, depreciation, inventory, notes and interest, and accrued revenue and expenses. This course is extremely valuable for anyone thinking of entering into the field of accounting as a career choice.

# **Accounting IV - Business Simulations**

Prerequisite: Accounting III .50 credit/1 semester Grades 10-12





This course is a continuation of Accounting I-III curriculum with emphasis on real world application of learned skills. Students will complete multiple business simulations related to sole-proprietorships, partnerships, and corporations in both the service and retail fields. This course is extremely valuable for anyone thinking of entering into the field of accounting as a career choice.

# Entrepreneurship

.50 credit/1 semester Grades 9-12





This course gives students a basic knowledge of business and takes them step-by-step through the entire process of planning and owning their own fictitious business. The creation of a business plan is covered extensively and students will then create a plan for a business of their choice. Real-world context, individual and group projects, math, communication, and history are used throughout the course to enhance the students' learning experience and give them valuable hands-on experience needed to manage a successful business.

#### **Personal Finance**

.50 credit/1 semester Grades 9-12





This course will help you learn how to plan and manage your personal finances, live a financially successful life, and take financial responsibility as a citizen. The personal focus of this course makes it relevant and meaningful to all; in particular, those just starting down the path to personal financial independence. Topics include the banking system, checking accounts, savings accounts, the use of credit, investing, insurance, budgeting, and money management.

# Sports and Entertainment Marketing

.50 credit/1 semester Grades 9-12





In this course, students will explore the intriguing world of sports and entertainment from the perspective of marketing. Key marketing concepts and core standards of marketing are presented using real examples from sports and entertainment. This field is rapidly growing, and many colleges now offer specializations in this subject. Students will learn how and why a product, service, or idea gets from where it is produced or created to where it is consumed. Knowledge of marketing is indispensable to anyone who is planning a business career.

#### **Business Mathematics**

1 credit/full year Grades 9-12





This course teaches basic math skills for financial situations. Students will learn how to manage their money and their expenses while making financial and business decisions. Topics include calculating income; maintaining checking and savings accounts; understanding charge accounts, credit cards, and loans; vehicle costs; housing costs; insurance; and investments.

This course will be of great value to both students who are interested in pursuing a college degree in business, and those who just want to gain a better understanding of how math will play a part of their everyday life.

#### **Yearbook Publication**

Fall Semester .50 credit/1 semester \*This course satisfies .5 credit computer requirement Grades 9-12





This is a unique course that gives high school students an on-the-job learning experience in producing a published book and in running a small business. Creating Raymond's yearbook, The Pynecone, takes a great deal of enthusiasm and dedication. Students will learn and practice all parts of publication production including: page layout and design, writing and revising copy, editing, proofing, taking photographs, cropping copy, advertising, and use of publication computer software. Students will also become aware of the responsibilities of running a small business including working within a budget, meeting deadlines, and being part of a team effort throughout the process.



# **World Language**

#### French I

1 credit/full year Grades 9-12







French I is an introductory course in which the primary objectives are the promotion of communicative abilities in the French language, including speaking, reading, writing, and comprehension (oral, written, reading). The student will learn to speak and understand basic everyday French. The student will be expected to write descriptive sentences in the language. The course will also help students to develop an appreciation for the French language and French-speaking cultures and their influences around the world. Students must be able to analyze critically, memorize, and study/learn independently in class in addition to outside of class.

#### French II

Prerequisite:: French I 1 credit/full year Grades 10-12







The primary objectives of French II are the continued promotion of communicative abilities in the French language, including speaking, reading, writing, and comprehension (oral, written, reading). Students taking this course will learn to understand and respond to more complex conversation, read longer paragraphs, and write French sentences on a grammatically and structurally more complex level. Students will also be expected to write short compositions and develop a deeper appreciation and understanding of the French language and French-speaking cultures. Students must be able to analyze critically, memorize, and study/learn independently in class in addition to outside of class.

#### French III

Prerequisite:: French II 1 credit/full year Grades 11-12







Student acquisition of balanced skills and increased fluency in French are the primary objective in French III. Situational activities provide opportunities for oral and written practice. The skills of understanding, speaking, reading and writing are emphasized with increased emphasis on complexity. Students are expected to read and discuss simple French literary works and write short compositions in the target language. A cultural component of this course will be the discussion and study of francophone countries and cultures and their relation to America.

#### French IV

Prerequisite: French III 1 credit/full year Grades 12







French IV is designed to place an emphasis on advanced vocabulary and grammar and allow the student the opportunity to improve his/her ability to discuss, in French, various aspects of French and American culture. Students will study the history of France in addition to different authors and works from different time periods coordinated with increasing vocabulary and written practice. Students will be expected to discuss and use the language more actively.

### Spanish I

1 credit/full year Grades 9-12







Spanish I is an introductory course designed to help the student understand, speak, read and write Spanish as it is used today throughout the Spanish-speaking world. This course is recommended for students with a high interest in learning the Spanish language and culture, and who have an adequate grasp of English grammar. Students must be able to analyze critically, memorize, and study/learn independently as well as in class.

# Spanish II

Prerequisite: Spanish I 1 credit/full year Grades 9-12







Spanish II builds on the grammar, vocabulary and syntax begun in the first year. Continuing development of writing, reading and communication skills are stressed, along with an expansion of cultural themes. Memorization skills and critical analysis are important for proficiency in Spanish.

#### Spanish III

Prerequisite: Spanish II 1 credit/full year Grades 10-12







Spanish III begins with a thorough review of basic grammar and vocabulary studied the first two years. Situational activities provide opportunities for oral and written practice. In addition, students are encouraged to use the language more actively. The study of culture is an integral part of this course. Students will be learning about the geography, history, and culture of Spanish speaking countries.

#### Spanish IV

Prerequisite:Spanish III 1 credit/full year Grade 11-12







Spanish IV is designed to allow the student the opportunity to improve his/her ability to discuss, in Spanish, various aspects of the Spanish and American cultures. There will be continued and intensive study of Spanish authors, which will serve as the starting point for discussions, projects, and papers. Review of troublesome grammatical points will be coordinated with increasing vocabulary skills in order to communicate with the Spanish-speaking world.

# Family & Consumer Sciences

### **Foods and Nutrition**

.50 credit/1 semester Grades 9-12



Students will learn the principles of basic food preparation, nutrition, meal planning, table service and manners. They will learn about the global impact on food supplies and how food relates in our everyday lives. Through labs, projects and class work, students will practice preparation techniques and enhance cooking skills for a lifetime of fun and healthy eating.

#### Health

.50 credit/1 semester Grade 10



Health education provides students with subject matter and learning activities necessary for the acquisition of knowledge, attitudes, appreciations, and behaviors essential to the growth, development, and well-being of each individual. Topics will include: nutrition, substance use and abuse, sexually transmitted diseases, fitness and current health topics.

# **Technical Education**

# Woodworking I

.50 credit/1 semester Grades 9-12





This introductory course provides an environment, instruction and activities that enable students to safely and effectively use woodworking tools, equipment and materials in fabricating wood projects. Students are taught to design, draw, and interpret project plans. They then construct a basic project while learning safety and procedures. The selection of their next project is based on their interests, aptitudes and abilities.

# Woodworking II

Prerequisite: Woodworking I .50 credit/1 semester Grades 9-12





This course is a continuation of Woodworking I with a shift from novelty softwood projects to hardwood cabinet and furniture making. Students will have the opportunity to develop craftsmen level skills as they construct drawers, doors, and sophisticated wood joints. They will also learn spindle and bowl turning on the lathe. This course also includes a unit in advanced finishing.

# Fine Woodworking

.50 credit/1 semester Grades 10-12





This course is an introduction to fine woodworking based on the instruction and application of basic woodworking skills. This is a thorough and intense class and is intended for the serious student only. The course includes in-depth instruction of all hand, power, and stationary tools and thorough instruction on the elements of design, shop drawings, and wood science. The course introduces the manipulation of materials, drawings, hand and power tool sharpening, joinery, assembly, and preparation for and finishing, to accomplish fine woodworking. The business side of woodworking is also discussed including the creation of a portfolio, customer relations, and wood shop set-up. **This course is offered every other year.** 

# **Wood & Construction Technology**

1 credit/full year Grades 9-12





This course is designed for students who have an interest in the construction trades, specifically residential construction. Students will learn basic architectural design and drafting, building materials, codes, and specifications, hand and power tool maintenance/operation, concrete mixing, framing, siding, roofing, drywall, basic plumbing and house wiring. The major projects in this class are post and beam construction, utility sheds and small structures. Infused into all aspects of this class is a comprehensive safety program.

# Introduction to Electricity and Electronics

Required: Algebra I .50 credit/1 semester Grades 10-12





This introductory Electricity and Electronics course provides the student with a program of study necessary for developing basic electronic skills. Career opportunities in the field of electronics will be explored. The student will gain an understanding of AC/DC basic circuits, digital circuits, and basic electronic devices. The student will work with hand tools, meters, and soldering irons while building a variety of projects.

# **Digital Photography**

.50 credit/1 semester
\*This course satisfies .5 credit computer requirement or .5 art requirement
Grades 10-12



This introductory course is designed to provide the student with an experiential class designed for practicing and developing basic photography skills as it applies to the quality of professional photography. The creative use of photography techniques as they relate to individual expression will be considered. Special projects and a final portfolio are required.

# Intro to Boat Building

.50 credit/1 semester Grades 9-12 Prerequisite: Wood I



For those looking for an introduction to traditional wooden boat construction. Students will build a semi-dory skiff combining marine plywood, oak, and various species found locally. The course will start with understanding boat plans and lofting, and proceed through scarfing, framing, planking, and interior joinery work, while learning proper hand and power tool usage. In addition, students will explore the fundamentals of seamanship including sail theory, plotting, navigating, and knot work as well as building their own wooden model sailboats.

# **Additional Learning Programs**

# **EXTENDED LEARNING OPPORTUNITY**

Extended Learning Opportunities (ELOs) are available to all students at Raymond High School. ELOs promote student engagement, provide structure and authentic participation in real-world learning and career experiences. Extended learning opportunities can assist students with decision making regarding post-secondary plans. ELOs can take place during the school day, after school, on weekends or over the summer months.

#### ELO's have four general components:

- 1. **Research**: meet competencies (points you must know to get credit), information can be in any form that provides evidence that you understood something new and can use it in a way new to you.
- 2. **Reflection**: keep a journal or blog during the ELO, use the journal to track what you have done and why.
- 3. **Product:** putting what you have learned into a form that demonstrates the information you have acquired such as portfolios, presentations, performances, rebuilt engines, job performance reviews from an employer/mentor, etc.
- 4. **Presentation**: actively communicate what you have accomplished to Individuals involved in your ELO. You will demonstrate your new knowledge and explain how your learning met the competencies.

#### <u>VLACS – Virtual Learning Academy Charter School</u>

The Virtual Learning Academy Charter School is a Statewide, online high school that is available, free of charge, to all high school students who live in New Hampshire.

#### **Description:**

The earned grade will be calculated into the student's GPA.

There are no restrictions based on grades to qualify for classes.

#### **Procedure:**

VLACS will control the sign-up period.

Students are required to meet with their school counselor to obtain paperwork prior to signing up for a VLACS course

### **ADULT EDUCATION**

#### **Description**:

- The earned grade will be calculated into the student's GPA.
- There are no restrictions based on grades to qualify for classes.
- Students will be allowed to make up 3 required credits outside of Raymond High School while they are students at RHS.

#### Procedure:

All rules and regulations of adult education programs will be recognized and followed by Raymond High School.

School counselor and principal must approve the program and class to be taken.

# Seacoast School of Technology Course Descriptions

# **FIRST YEAR PROGRAMS**

Pre-Engineering I is available for 9<sup>th</sup>-12<sup>th</sup> grade students that have completed Algebra 1.

All other first-year programs are available for 11<sup>th</sup>-12<sup>th</sup> grade students, as well as 10<sup>th</sup> grade students on a space-available basis. Program-specific prerequisites do apply.

All SST courses meet NH Scholar and 4th year math exposure requirements.

#### Animal & Plant Science I - NH Scholars STEM & Lab Science

Do you love animals? Making things grow? Learn to expertly care for living things and prepare yourself for a career as a veterinarian, vet tech, barn/farm/greenhouse manager and many other careers working with animals and plants. You'll learn to care for and handle companion animals, recognize behavior, and begin on the road to veterinary care for both large and small animals. In addition, you will study aquariums allowing you to experience raising fish for fun or sale and aquaculture allowing you to gain hands-on experience raising food for consumption. [Prerequisite – Biology]

# **Automotive Technologies I - NH Scholars STEM**

Using Snap-on hand tools and the same computer equipment found in well-equipped dealerships, learn bumper-to-bumper automotive systems and their repair. Hone your skills by working on customer and donated vehicles in a live shop that includes 13 bays, a parts room, 8 lifts, an in-ground alignment system and much more. Students have the opportunity to interview for internships at local dealerships or independent shops. This program is certified through the National Automotive Technicians Education Foundation (NATEF).

# **Biomedical Science & Technology I -** NH Scholars STEM & Lab Science- Dual Enrollment through SNHU

Working in a state-of-the-art lab, you will be on the cutting edge of science studying molecular genetics and genetic engineering, cancer biology, microbiology, immunology, bioinformatics, DNA sequencing, environmental and marine science and more. You will gain techniques and knowledge that will prepare you to pursue careers in medicine, genetics, pathology, forensics, molecular biology and many other science-related fields. \*Available at the Elective and Honors levels\*

# **Building Construction Technologies I - NH Scholars STEM**

Are you the type of person who takes pride in being able to create things with your own two hands? Learn basic skills in carpentry, hand and power tools, framing, remodeling, materials usage, green building and much more. You'll perfect your skills by working on a variety of real construction and renovation projects in our local community, and by the end of the year you will have the know-how to make a building weathertight.

# **Careers in Education I -** NH Scholars STEM & Social Science – Dual Enrollment through Great Bay Community College

The Careers in Education program is designed for students considering working in a variety of education-related roles ranging from early childhood education to high school teacher, teacher of related services such as occupational, physical, and speech & language therapy, ESOL, special education, paraprofessional, unified arts, school counselor, child psychologist, social worker, administrator and more. This program provides a solid foundation for careers working with learners of any age in any setting. Research a career that interests you. Develop your written reflection and presentation skills in a supportive and collaborative community. In addition to planning and teaching in The Wright Start Preschool, conducting job shadows, and meeting guest speakers from a variety of professions, you will also study theories of social-emotional and cognitive development, effective communication, classroom management, lesson planning and best instructional practices. Our CTSO, Educators Rising, provides leadership opportunities at the

local, state and national levels. Participate in state-wide conferences and competitions to build your professional skills. State and local community service opportunities are embedded in this course. This class may be taken for 6 college credits (Foundations of Education, Behavioral Challenges in the Classroom).

# **Computer Science I -** NH Scholars STEM & Lab Science – Dual Enrollment through Great Bay Community College

(2 semester-based courses)

# **Introduction to Computer Science**

Utilizing the Python programming language, you will learn to write your own computer programs. With an emphasis on computational thinking and problem solving, develop the skills to find novel methods of finding solutions. This course will form the foundation for all future study in the field of Computer Science. [Offered semester 1] [Prerequisite – Algebra I with a grade of "C" or better]

#### C#

This course will provide you with an understanding of structured, procedural and event-driven programming techniques. Gain experience in program planning, design and coding as you complete lab work and assignments. Plan, design, code and test a variety of games, simulations and productivity applications. You will learn to use the Visual C# .NET programming language and integrated development environment. [Offered semester 2] [Prerequisite – Introduction to Computer Science]

# Culinary Arts I - NH Scholars STEM & Art

Learn the introductory skills for a career in the culinary industry. Daily hands-on activities and training will have you producing perfect knife cuts and restaurant quality meals from scratch. You will learn the importance of sanitation and nutrition. This course will emphasize the appropriate standard of behavior and uniform set by culinary professionals. Explore both savory cooking and baking while developing your palate by exploring regional cuisines.

# **Digital Media Arts I -** NH Scholars STEM & Art – Dual Enrollment through Great Bay Community College

(2 semester-based courses)

### **Graphic Design**

With a strong influence from the fine arts, this course focuses on the concepts of good design and uses computer software such as Adobe Photoshop, Illustrator and InDesign to foster student creativity. [Offered semester 1]

#### **Animation**

Breathe life into your artwork and make your creations come alive! Utilizing computer programs from Autodesk and Adobe, you will learn how to transform two-dimensional artwork into three-dimensional, digitally-animated models. [Offered semester 2]

### Health Science Technologies I - NH Scholars STEM & Lab Science

If you're thinking about any career in the health field, like becoming a doctor, nurse, physical therapist, dentist or even an EMT, then this course is for you. Learn about the human body and help people get and stay healthy. You will earn your First Aid certification while exploring human anatomy and physiology, medical terminology, safety, and legal and ethical issues within the health fields. [Prerequisite – Biology]

# **Marketing Technologies I -** NH Scholars STEM & Social Science – Dual Enrollment through Great Bay Community College

Want to be your own boss? Marketing Technologies introduces the processes and strategies involved in transferring business products or services to a consumer. Through interactive discussions and projects, the course's main focus is on analyzing the marketing mix, its interrelationships and how it is used in the marketing process. This course has a strong emphasis on business conduct, speaking and presentation skills. Some topics of study are: entrepreneurship, management, sports and entertainment marketing, fashion merchandising, e-commerce, hospitality and tourism and international studies. You'll develop your own business and learn how to market it, as well as operate the Upper Deck, SST's school store.

# **Pre-Engineering I -** NH Scholars STEM & Lab Science – Dual Enrollment through Great Bay Community College

(2 semester-based courses) Open to students grades 9-12

# SST Introduction to Engineering Design

Want to find out how to turn your innovative ideas into reality? Engineers are involved in everything that has ever been designed, built or manufactured. In this course, you will learn about the varied roles engineers play in our society, discover new career paths and possibilities, and develop engineering knowledge and skills, such as creating models and prototypes (physical and virtual). [Offered semester 1] [Prerequisite – Algebra I]

# SST Principles of Engineering

Make the leap from dreamer to doer! Engineers serve society by using engineering principles to develop solutions to technical problems and explore multiple manufacturing processes and technology systems. Come and participate in compelling, real-world challenges that will help you become a better collaborator and thinker. [Offered semester 2] [Prerequisite – Algebra I]

# **Welding Technologies I -** NH Scholars STEM- Dual Enrollment through Great Bay Community College

If you're scared of melting metal, flying sparks, or holding torches in your hands that are hotter than the surface of the sun, then Welding Technologies is probably not for you. Still interested? You'll learn the basic techniques of STICK, MIG, TIG, plasma, brazing, soldering, blueprint reading and electricity. This program is ideal for students interested in the metal trades including welding and machining, as well as artists who want to work with metal.

# **SECOND-YEAR PROGRAMS**

# **Animal & Plant Science II -** NH Scholars STEM & Lab Science – Dual Enrollment through Great Bay Community College

Continue to build on your experience, knowledge and hands-on skills. You'll spend several months at a local horse barn studying equine science, learn more about greenhouse management, sustainable food production, aquaponics and hydroponics, landscape and floral design, animal nutrition and reproduction, and complete a week-long internship in an area of personal interest. Participation and competition in FFA events is strongly encouraged. [Prerequisite – Animal & Plant Science I]

# **Automotive Technologies II -** NH Scholars STEM – Dual Enrollment through Manchester Community College

Continue your automotive training by working in our live car repair and state inspection facility. Perform more complex repairs and tasks ranging from light mechanical, routine maintenance and parts ordering. You'll complete units on engine performance and diagnostics, suspension and steering, four-wheel alignment, earn your ASE Maintenance and Light Repair certification and position yourself for a career in the automotive industry. [Prerequisite – Automotive Technologies I]

# **Biomedical Science & Technology II -** NH Scholars STEM & Lab Science – Dual Enrollment through SNHU

This capstone course is an in-depth exploration of emerging technologies and innovations within the scientific community. You will explore current biotechnological applications in medicine, agriculture, forensics and the environment. Topics include gene modification, protein microarrays, directed mutagenesis, bioinformatics, DNA sequencing and more. You will also have the opportunity to participate in advanced internships during the school year and perform original research. [Prerequisite – Biomedical Science & Technology I] \*Available at Elective and Honors levels\*

# **Building Construction Technologies II - NH Scholars STEM**

Continue to polish your technical building skills and examine topics such as energy efficiency, interior work and trim and blueprint reading. You'll put your knowledge to good use by building structures in the community such as homes, garages, sheds, additions and more. By the time you complete this program, you will be capable of doing all interior and exterior carpentry work on building projects large and small, and be ready to enter leadership programs for construction project managers. [Prerequisite – Building Construction Technologies I]

# **Careers in Education II -** NH Scholars STEM & Social Science – Dual Enrollment through Great Bay Community College

Continue to learn the craft of educating and supporting others. Work with your teacher to design job shadows and internship opportunities in your areas of interest. Create a professional portfolio tailored to your specific goals. Work as a team to design community service projects; expand your leadership experience by running for program and state leadership positions. Continue to add professional skills to your repertoire and apply those skills in the field. Coursework expands on topics from year one and also includes curriculum development, working with diverse learners, Universal Design for Learning, best instructional practices and more. Internships in local and sending school communities are available for preschool, elementary, middle and high school, art/music/physical education, special education, physical/occupational/speech & language therapy, and early childhood education and administration. This course is an excellent opportunity to continue exploring child-centered professions and decide which career path to pursue after high school. This class may be taken for 6 college credits (Intro to Exceptionalities, Teaching & Learning Process).

# **Computer Science II -** NH Scholars STEM & Lab Science – Dual Enrollment through Great Bay Community College

(2 semester-based courses)

#### Java

The Java programming language is the major force behind the World Wide Web and can be found running on over 3 billion computational devices on the planet. The purpose of this course is to provide a solid foundation in the Java programming language, as well as further refine your knowledge of object-oriented design. [Offered Semester 1] [Prerequisite – Introduction to Computer Science]

#### C++

C++ is the industrial heart of the computer software industry and is the primary development tool used to create major applications used by millions of people every day in business productivity, as well as video games. This course will introduce you to the fundamentals of structured programming, the procedural aspects of the C++ language, object-oriented design and implementation, as well as an introduction to basic data structures. You will create programs to demonstrate the topics of program control, functions, arrays, pointers, classes and objects. Emphasis will be placed on the creation of platform-independent applications. [Offered Semester 2] [Prerequisite – Introduction to Computer Science]

# **Culinary Arts II -** NH Scholars STEM & Art – Dual Enrollment through Lakes Region Community College

Develop your cooking and baking skills while exploring the cooking techniques and cultural aspects of global cuisines! You will learn advanced techniques, such as smoking, pickling and meat fabrication. Learn the managerial side of the restaurant business - from food cost to purchasing, menu writing and event planning. [Prerequisite – Culinary Arts I]

# **Digital Media Arts II -** NH Scholars STEM & Art – Dual Enrollment through Great Bay Community College

(2 semester-based courses)

# Web Design

Design your own web pages using the same techniques as professional graphic designers and web developers. Using Cascading Style Sheets (CSS) and the Adobe Design Premium Suite, you'll learn best practices in designing for the web. [Offered semester 1]

### **Video Production**

Learn how to operate all of the equipment in a cutting-edge video production studio that includes a green screen, high definition cameras, sound and lighting control room and much more. You will film, edit, and produce videos for both personal and commercial purposes using the editing software Premiere and After Effects. [Offered semester 2]

# **Health Science Technologies II -** NH Scholars STEM & Lab Science – Dual Enrollment through Great Bay Community College

Dive deeper into the complexities of the human body by completing units on CPR and the cardiorespiratory, gastrointestinal, reproductive, endocrine and nervous systems. In addition to classroom and lab work on the SST campus, you will gain real-world experience through a ten-week internship at a local healthcare facility. Additionally, select students will have the opportunity to earn their Licensed Nursing Assistant (LNA) Certificate. [Prerequisite – Health Science Technologies I]

# **Marketing Technologies II -** NH Scholars STEM & Social Science – Dual Enrollment through Great Bay Community College

You'll complete an individualized curriculum that is tailored to your personal business interests and aspirations. Recent areas of specialization include business management, sports and entertainment management, hospitality, fashion, event planning, advertising, entrepreneurship, business law, international business and finance. You'll also work on real-life projects in the community, including planning and running the Small Business Showcase with the Exeter Area and Hampton Area Chamber of Commerce. [Prerequisite- Marketing Technologies I]

# **Pre-Engineering II -** NH Scholars STEM & Lab Science – Dual Enrollment through Great Bay Community College

(2 semester-based courses)

# **Digital Electronics**

Investigate how machines think and work! Using applied logic, you will learn about electronics and digital systems, explore engineering design, build circuits and develop electronics troubleshooting techniques. [Offered semester 1]

[Prerequisite – Either Introduction to Engineering Design or Principles of Engineering]

#### Civil Engineering & Architecture

Study the way that man-made structures such as buildings, dams, bridges and roads affect our environment and the way we live. Through a series of hands-on projects and guest speakers with expertise in a variety of topics, you will learn about the complex infrastructure that makes society work. [Offered semester 2]

[Prerequisite – Either Introduction to Engineering Design or Principles of Engineering]

# **Welding Technologies II -** NH Scholars STEM – Dual Enrollment through Great Bay Community College

Enhance your welding skills by working with different alloys like aluminum and stainless steel, learning different techniques and welding positions, performing actual jobs of metal fabrication, manufacturing, repair and CNC Plasma. At the completion of this course, you will have earned your OSHA (Occupational Safety & Health) training certificate and have enough skills and experience to take your certification tests in SMAW (STICK), GMAW (MIG) and GTAW (TIG) welding. [Prerequisite - Welding Technologies I]